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CRASH

ZX SPECTRUM

ANNUAL 2018

SPECTRUM

A BLAST FROM THE PAST!

REVIEWS - PREVIEWS - GAME DIARY

WIN A COOL NEW NEXT!

CRASH ZX SPECTRUM

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MICRONET
You can't talk to CRASH via Micronet any more (sob), but for the nostalgic our MBX was 105845851

Cover by Oliver Frey

FUSIONRETROBOOKS

SIR CLIVE HAS RETURNED

PROJECT II

Jetboat Joe

www.langfordproductions.com

NOW WHERE WAS I WHEN I LEFT OFF...?

Just about 34 years ago as you read this, we put the first issue of CRASH to bed. The black and white pages went to an East London newspaper printer, the colour pages to a printer in Milton Keynes. The last item I remember writing was the editorial, never an easy matter for a first edition, but I felt I had to tackle the new magazine's unpropitious name; I typed out...

'Perhaps the first item is the magazine's name. As

editor of CRASH I've been surprised by how few people in the software industry have pointed out that it is a strange name, or that in computer terminology a crash is not a particularly Good Thing. In fact not a single person has said it yet so perhaps I should keep quiet, but the name arrived, like most titles, in a flash and simply seemed right. I like to think it symbolises more the power and strength of the computer game than anything else. As a magazine title CRASH is short, sharp and to the point, and anyway it makes it the only computer magazine without the word computer stuck somewhere in it, and that must be worth some points!'

In truth that was a fiblet because there had been a number of slightly puzzled comments, not least from the bowels of Sportscene Specialist Publishing (later Dennis Publishing) where at the same time *Your Spectrum* (*Your Sinclair*) was readying for launch. As potential rivals, the editor-elect reckoned our name would be our undoing. Such a sage prophecy...!

When you start something like a periodical magazine, there's no clear idea of future success, only a hope for it. There was a long time lapse between delivering an issue to distribution and **a)** knowing how well it had sold, and **b)** getting paid! We only knew the fairly happy result for Issue 1 after printing Issue 3. Unfortunately, our distributor Wells Gardner & Darton went bankrupt after delivering Issue 2 to the newstrade. As for payment, well... The distributor pays a third of the total owed at 30 days of receipt of invoice, a third at 60 days, and the balance less unsold copies (returns) at 90 days. That meant WG&D only ever paid Newsfield the first third of Issue 1.

Fortunately, Comag, Britain's largest distributor, had kept an eye on sales of CRASH and stepped in to rescue us. They collected the outstanding payments from the notoriously tight-fisted newstrade and for the next six months paid us one-third on delivery, the next at 30 days and the balance less returns at 120 days. Newsfield and CRASH was saved!

Otherwise you'd have been left with *Sinclair User* and *Your Sinclair* – what an absolutely dreadful fate that would have been. ■

THE FREEDOM TO BULL★★★★

A very wise man once said to me – he must have been very wise because he was a barrister – 'Mister Kean, you are too bold a journalist.' He wasn't paying me a compliment; it was our second meeting, on that occasion to decide what to do in the face of an injunction to prevent distribution of CRASH Issue 19 by East Midland Allied Press, the parent company of *Sinclair User*. The occasion, of course, was the four-page spoof *Unclear User*. I thought the QC's non-compliment was a tad unfair, seeing as I hadn't written a word of *Unclear User*, but – alas – them's the rules governing a publisher: being the publisher makes you the guilty party.

However, more to the point, the first occasion for exhibiting my journalistic boldness before a member of the Bar was after the KERRASH! news item we published in the August 1984 issue about the demise of Imagine Software (the original company, not the later Ocean incarnation). It had unflattering things to say about Imagine's three key directors and they sued Newsfield, CRASH *et moi* for defamation of character. As things transpired, the threat fizzled out after a brief revival following the detailed article on the subject in the 1984 Christmas Special.†

But in an important sense my censorious legal eagle was almost correct – I wasn't bold so much as journalistically indignant at the antics of some in the business we were growing up with. Usually, it's wise for publications to avoid getting personal, but it was the latitude allowed through being an entirely independent publishing company that made us 'too bold'. Indeed, reflecting on a year of publishing CRASH I wrote in the 1984 Christmas Special:

'Being a totally independent outfit has meant having a lot more freedom to speak minds more than is often possible in a publication owned and operated by a large corporation. In CRASH we have tried to offer writers the freedom to say what they want, and although this can lead to the risk of libel, responsible writers can make use of it.'

The standard rule of

† A much longer article on Imagine's collapse was published in the 1984 Christmas Special, and may be read at: http://www.crashonline.org.uk/12/imagine.htm

magazine publishing is to never upset advertisers, real, potential or *Imagined*. But some advertisers just got my goat, so I outed them in editorials. (Incidentally, Imagine Software at the point of its spectacularly public crash owed CRASH a lot of money we badly needed.)

Mark Butler and David Lawson, two of Imagine Software Ltd's directors.

I had a snap at Mark Butler, a former director of Imagine, later in 1984 at Thor Computer Software. He phoned to say Thor wouldn't be paying for *The House Jack Built* advert (on page 176 of the CRASH Christmas issue), adding that there was no point ringing him back because he didn't want to talk to anyone. Another Thor person said the advert had been placed on a left-hand page and they always insisted on a right-hand position.
In Issue 13 I wrote: 'Our

paperwork confirmations, which they [Thor] were sent, shows that no special conditions were placed on the booking … it just goes to show that you can't teach an old dog new tricks – like behaving decently for once.'

Whoops …

I wrote above of imaginary advertisers, one of which was Interceptor Micro's (they of the irritating apostrophe), owned by father and son Julian and Richard Jones. The youngster rang to complain about an 'inaccurate' review for one of Interceptor's games (for *inaccurate*, read low scoring) and said he was pulling all further advertising from CRASH. As I wrote in the following month's editorial, I was somewhat bemused by this because Interceptor Micro's never had (and never did) place any adverts in CRASH. I may have added that even if Master Jones was to book an ad, I would instruct the advertisement manager to reject it … but perhaps that was just fond imagining.

It wasn't only advertisers, real or otherwise, that CRASH had a go at. As

Richard Jones of Interceptor and the bonnet of his Rolls Royce.

early as Issue 4, under the heading 'Trashy Gossip', I wrote that a 'cynically up-market publication' (*Personal Computer Games*) dubbed CRASH a 'down-market magazine which cares nothing for objectivity'. Well… really! *PCG* took exception

to our article on programmer Steve Turner because it was written by none other than Steve's software publisher Andrew Hewson.

I riposted that I could repeat a name I'd heard on several lips which said that the initials *PCG* really stand for ***Pukingly Cruddy Garbage*** …'

Whoops …

Still in a very short time after that jab *PCG*'s editor Chris Anderson joined Newsfield to launch ZZAP!64 – so there you go!

Readers, too, got it in the righteous neck sometimes. In the October 1984 editorial, under the heading of 'Upsetting Expletives', I answered critics who had complained of 'naughty words' in the August issue with the stern admonishment that: *'Standards in any form of journalism are to do with accuracy, interest and, above all, honesty of expression – not with the occasional use of an expletive. The editorial piece about Imagine was written from an impassioned point of view, and as such I regard the use of the word bull**** (censored for fear of further upset!) as appropriate. I'm sorry if it offended readers, but I do not apologise for using it in the context.'*

Ah… those were the good old days, eh? ■

WORLD OF SPECTRUM

The official world archive for the Sinclair ZX Spectrum is getting an upgrade, Lee Fogarty tells me. He says: 'It's great to see, after all this time, Spectrum favourites such as the Oliver Twins, Roger and Oli (*Oh, too kind, Lee —Ed*), and many others continuing to donate to WoS. Not forgetting work from **Mort!** and his team with the hi-res scans, and of course the testers. We are all very excited with how the new site is coming along.'

The work in progress is at: http://live.worldofspectrum.org ■

'**What else** can I put on the Oliver Frey-Roger Kean mantlepiece in the virtual CRASH Office,' video genius **Jeremy Wood** asked as he neared completion of the Kickstarter video for Fusion Retro Books' publisher Chris Wilkins.

Bemused by what Jeremy had already accomplished, I suggested a CRASH Readers' Award. 'Remind me what that looked like,' he asked, and I sent over a few JPEGs and a scan from an issue of CRASH of the award symbol. Twenty minutes later, there it was, perched on the mantle with the other odds and ends in glorious 3D. I could only wish that Jeremy had been around back in the mid-1980s to make CRASH Towers look so wonderful. Great video! ■

UNCORRUPTED MEMORIES

OLIVER'S HANGING UP HIS AIRBRUSH

Yes, it's true. Thirty-four years after penning the first illustrations for the Crash Micro Games Action software catalogue and lord alone knows how many more for covers, maps, competitions, etc., Oliver Frey has said 'That's it, folks!'

Okay, it doesn't mean he won't be drawing or painting anything ever again, just backing away from the pressure of commissions so he can doodle to his heart's content at whatever takes his interest. In recent years there have been large posters for the Gracious Films productions of *From Bedrooms to Billions*, several covers for *Retro Gamer* magazine and a scattering of new game inlays – oh, and many Zzap-style line-drawing portraits, including a few hundred for EA Mythic in the US and Pitbull here in the UK!

Many have said that Oli's covers made CRASH, but he's always insisted that what made CRASH such an amazing experience was the readership – the true heroes. Oli Frey, modest as usual. ■

Robin Candy engages Oli in some serious conversation during the 1985 Zzap!64 launch party; and in 1986 Oli and CRASH cap taking a break in Cornwall.

Oliver Frey, busy signing posters for Andy Remic's film Memoirs of a Spectrum Addict *at home in Ludlow this summer. Thanks for the atmospheric photo, Andy!*

ADDICTIVITY 100%

CRASH readers were (are?) invariably imaginative and creative, so we liked to encourage submissions for illustrations and over the years some truly splendid drawings and paintings fell from the monthly mailbag. So it is with great pleasure we present this massive 'mural' poster below by CRASH reader **Mark Harrison**. See if you can name the 48 'lost' games, and spot the other CRASH and Spectrum-related references as well.

If you need any help to remember the games that made it, there's no better reference than **Andy Remic**'s *Memoirs of a Spectrum Addict*. A packed two hours of reminiscences from the great, good and naughty of Spectrum gaming (including a few useless words from your erstwhile —Ed). If you haven't got your copy yet, what are you waiting for? Go this very instant to: http://www.remicmedia.com/speccyaddict/ ■

THE REVIEWS

In the days of classic CRASH we frequently used three reviewers, but for the Annual we're relying on the opinions of two former 14-year-olds per game. In order that readers can hurl abuse at them for their views, we've even named them – *harrumph*.

Back then we rated **Value For Money**, but in the 1980s you had to part with your hard-earned pennies... well, pounds, for a game. Just about every game reviewed in the following pages is homebrewed and free to download, which makes the concept of value a little meaningless (nevertheless, for old time's sake it's still there but with a **Not/Applicable** tag). By the same token, prices are given only when relevant.

CRASH may have had a tradition of looking out for the reader, but this is a bit different. I feel that games authors should not be put off by receiving a less than stellar review – after all, the great thing is that so many people are still supporting the Spectrum and the ZX community of retro gamers, even more so because the coders' efforts are for love of programming games and they're offering us loads of fun stuff all for free.

Long live the Spectrum! ■

CRASH ON TELLY

Towards the end of 1984, our first year, Central Television News visited Ludlow to film and interview the young CRASH reviewer team at work (broadcast 19 Dec).

I reported in Issue 13 that: *'CTV News were intrigued at the idea of a national computer magazine being produced in "the ancient market town of Ludlow". I got to say a little piece myself (about what a brilliant magazine I work for — yes, it was a bit vacuous I admit), but star of the four-minute item was undoubtedly shy and retiring head reviewer Matthew Uffindell, whose calm, authoritative Shropshire accent must have put the fear of God up some software houses.'*

In the way of these things, the record of the broadcast went missing sometime last century and only my memory of the interview remained – until an archivist working on behalf of a documentary film-maker discovered the film as an item among several in an unmarked can stored at a London location. Here, then, are some stills from that ancient broadcast, seen for the first time. ■

The schoolboy team – far left: Dominic Handy, Matthew Uffindell (standing), Robin Candy, Ben Stone, lucky lad who happened to be in. Above: Dominic, Ben, Robin. Left: Matthew, putting the fear of God into software houses while Ben listens in to wise words. Below: er... your editor, pontificating, as usual.

A CRASH Smash

A·L·T·E·R E·G·O 2:

ALTER EGO 2: DREAMWALKER

Publisher: **RetroSouls**
Author: **Denis Grachev, Jerri and MmcM**
Memory required: **128K**
Language: **Machine code**
Released: **2014**

Dreamwalker is the follow-up to *Alter Ego* (2011). It's the story of a small boy, but he is not like other children. With no friends other than the companion he meets in his strange dreams, he seems to belong in another world, one where he can fly and where strawberry jelly grows like flowers.

The boy only truly lives in these dreams and this is the story of the Dreamwalker.

The object of the game is simple: collect the jelly to advance to the next level. The boy can switch places with his dream alter ego a limited number of times on each level to avoid enemies and reach otherwise inaccessible areas. Ladders allow access to different platforms and bouncing skulls hinder the little boy, losing him a life if touched.

Some levels have collapsing floors and these require further planning to avoid getting cut off from the remaining jellies. Judge the height of platforms carefully, as falling too far costs another life. Unlike the currently selected character, the dream-self doesn't have to obey the laws of gravity. He can walk over spaces and through skulls. The number of remaining character swaps is

D·R·E·A·M·W·A·L·K·E·R

shown next to the alter ego and is replenished every level.

Early levels only have purple jellies to collect but further on only the little boy's imaginary friend can collect the white. Other colours appear later in the game and they have their own set of rules. Level passwords are given out at certain points to enable a restart of the game near where you left off last time.

– think *Lode Runner* but just a few pixels bigger. The object of the game sounds simple and, during the early levels, it is, but as you progress, the puzzles become craftier. The levels are set out so cleverly that you need to look really carefully before starting to move about in order to get the jellies without running out of character swaps – at which point you can find yourself stranded, with no choice but to restart the level. This is maddening but you have only yourself to blame. This really is one of the best Spectrum games I've ever played. Go get yourself a copy now.

Mark R. Jones

to load up just to listen to the tunes. This is also a thinking man's game – a game that continues to keep your grey matter ticking over to the maximum as you work out a path to complete the level. I have one little niggle and that is only a part of the screen is used, leaving a big black void underneath – this is minor though as the graphics, especially the main character, are extremely detailed and colourful. A true gem of a game.

Chris Wilkins

CRITICISM

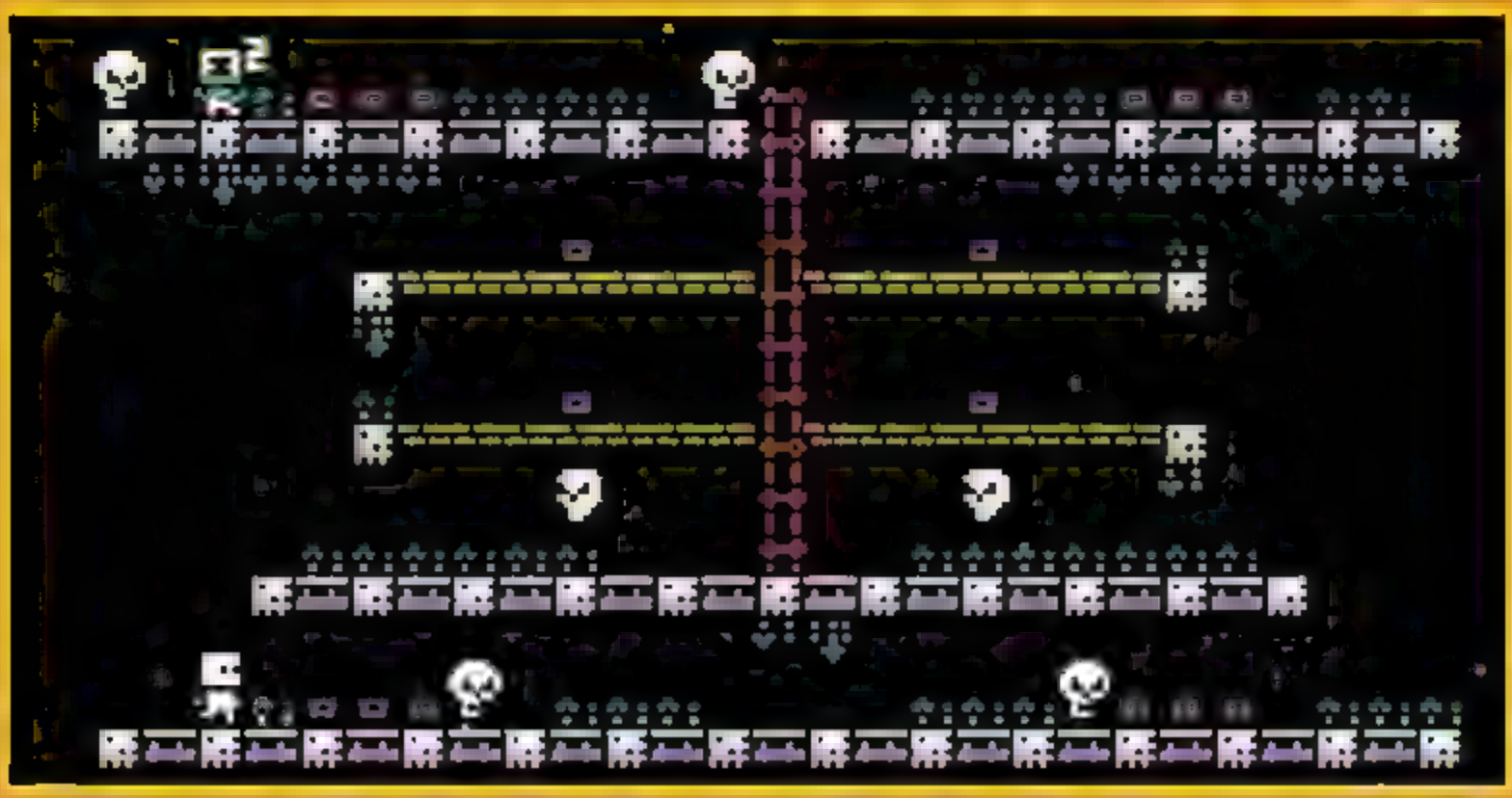
• This is brilliant! I can hardly fault it. What first strikes you when you start *Alter Ego 2: Dreamwalker* is the great 128K music and how beautifully animated the small graphics are.

CRITICISM

• The first thing to smack you in the face – or more properly, the ears – with this game is the music. It's absolutely stunning and it ranks as one of those games that you have

COMMENTS

Control keys: Q, A, O, P, SPACE switch
Joystick: Sinclair 2
Keyboard play: Very responsive
Use of colour: Excellent multi-colours in one 8x8 character square
Graphics: Small but beautifully drawn and animated
Sound: Two 128K tunes that get stuck in your head and nice spot effects
Skill levels: Progressively harder
Lives: 5
Screens: 35
Special features: Nirvana engine graphics
General rating: Excellent. One of the best Spectrum games ever.



BUBBLE MONKEY BROS

Publisher: **Fan made**
Author: **Gabriele Amore**
Memory required: **48K**
Released: **2015**

The legacy of the Spectrum can be attributed to many things, but the fact that it was the system that so many enthusiasts grew up with, typing in code for hours in their bedrooms with the hope that by the end of it something resembling a game would appear is one of the reasons why the Speccy is so fondly remembered. Happily, there are still people like Gabriele Amore who enjoy producing Spectrum games. He has quite a few homebrew titles under his belt: some half-finished or in need of polishing, some a bit 'different' and some that are lots of fun.

Bubble Monkey Bros is without a doubt in the latter category *and* a bit different.

You play a monkey desperate to collect all the bananas on the screen while avoiding the flying birds out to kill him. Consume every banana and soap appears, which can be eaten. The soap causes the monkey to fart bubbles that can trap enemy birds. Once caught, all they require is a nudge to kill them. Eliminating all of the feathered pests allows progress to the next stage.

Further into the game there are more varieties of murderous birds and more methods available to you to get at the bananas, such as a balloon pump which lets the monkey float up to the top of the screen, or a body of water which you must dive down through to reach the bananas at the bottom.

CRITICISM

• Though *Bubble Monkey Bros* is a fun little homebrew, it isn't without its flaws. There's no music, just generic 'gurgling', which becomes irritating very quickly. The controls are a bit slack. For instance, to climb up the screen you use the up-arrowed tiles, but you can walk over a tile several times while mashing the 'action' button before the game seems to realise what you want to do. At other times it's overly sensitive and you can be shot up to land on another tile that fires you up again into a killer bird, which is frustrating. Just jumping without the need to stand on 'up' tiles would have been better – which is the case deeper into the game.

Nevertheless, there is fun to be had and a two-player mode adds to the playability. *Bubble Monkey Bros* also gets a nod of approval for its farting monkey, as the current gaming scene is devoid of flatulent simians – something I'm sure we can all agree is a complete tragedy.

Ryan 'Riot' Coleman

CRITICISM

• What a frustrating game! Graphically and sonically functional – there is no music – and moving your ape around to collect the bananas is a pretty unforgiving experience which will result in many a Quickshot 2 joystick getting broken in game rage. Avoid really – just an AGD curiosity.

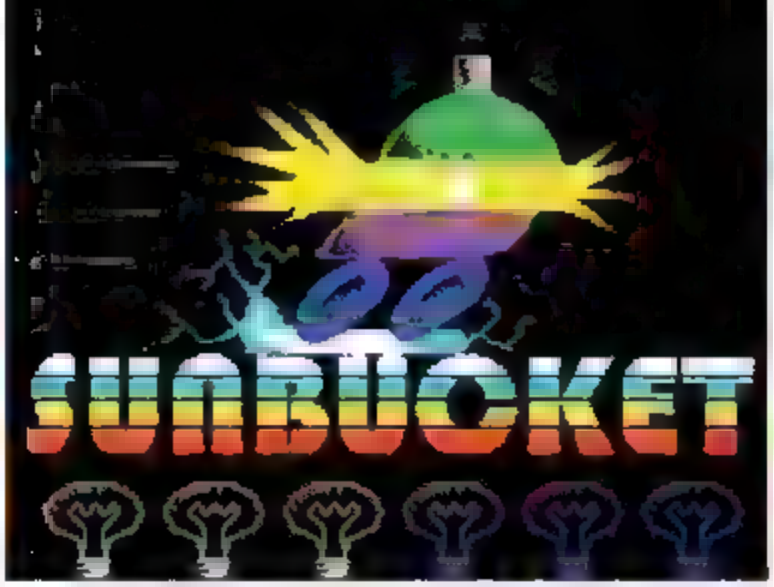
Chris Wilkins

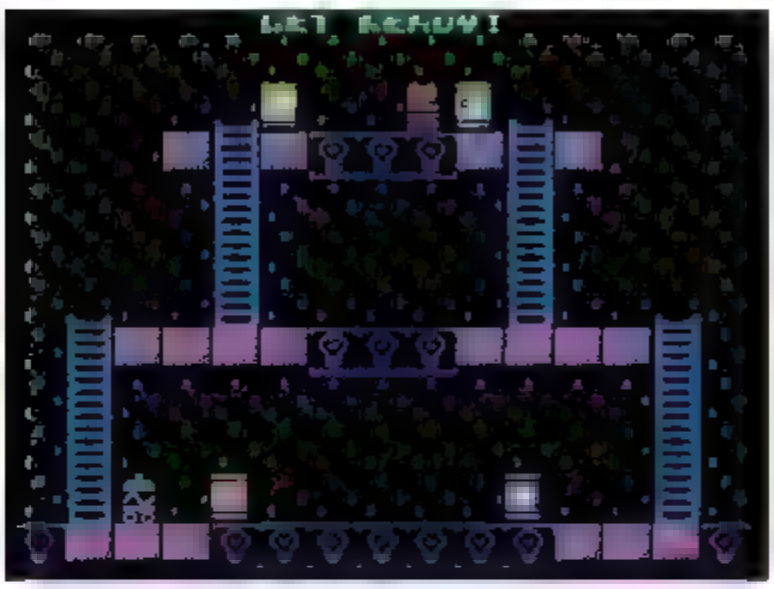
COMMENTS

Control keys: Fixed
Keyboard play: Often unresponsive
Use of colour: Bright and visually appealing
Graphics: Basic graphics but nicely detailed sprites
Sound: Irksome noise
Skill levels: 1
Screens: 9
General Rating: Basic fun.

SUN BUCKET

Publisher: **Stonechat Productions**
Author: **Dave Hughes & Lee Spoons**
Memory required: **48K**
Language: **Machine code**
Released: **2014**





Sun Bucket is an action-puzzle game that bears all the hallmarks of a true arcade classic: easy to get into but tricky to master. Sun Bucket – one of the strangest sprites ever (he looks like a green and pink saucepan on wheels) – must move around the platforms on each screen using his warm plasma field to switch on all the unlit light bulbs. This is accomplished by rolling over them and sometimes, just when all the bulbs are glowing, one or two of them might break, which means rolling over them again to get them working.

That might sound simple, and it would be if it weren't for the pesky bad guys guarding each of the many levels. Merciless Chasers, Happy Wanderers and Metronomic Patrollers all wait for Sun Bucket to cross their paths, a frequent occurrence because there's no jump facility. Don't panic though, the levels have been cleverly designed with this in mind. Just remember that one touch from a bad guy results in instant death!

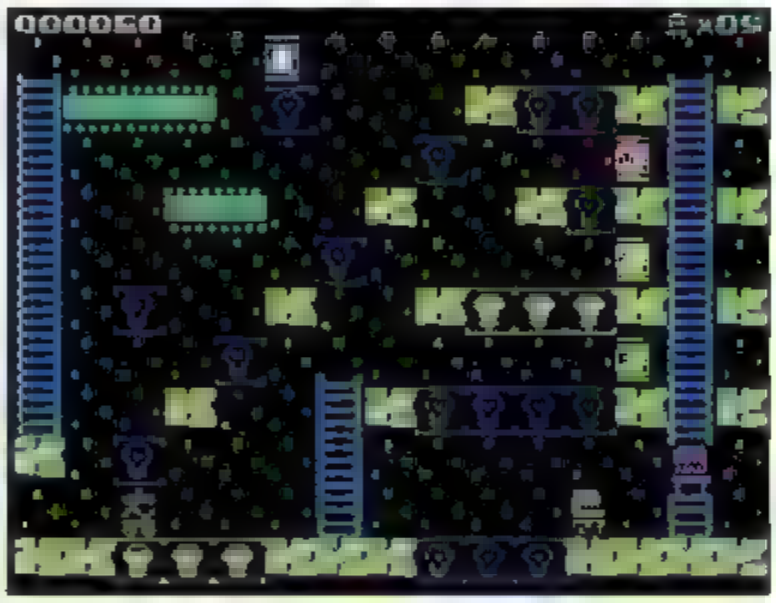
To add an extra bit of spice, lettered bonus cans have been placed in various positions on each level. Picking them up in the correct order spells MORE and earns an extra life. There are ten on offer, after which you earn bonus points instead.

CRITICISM

• When a game kicks off with a superb rendition of 'Danger! High Voltage' by Electric Six you know you're in for a treat. Einar Saukas's Nirvana Engine allows multi-coloured sprites and seeing these well-drawn sprites moving around for the first time on a Spectrum without a hint of colour clash is pretty amazing. And everything is extremely well animated and smooth too.

In between levels the player is treated to a nicely animated light bulb screen – a welcome break if it's needed. Another nice touch is the password system: use up all of your lives on one of the later levels and you're given a password to access that level again without the need of playing through to that point. In terms of gameplay, anyone familiar with the last level of *Donkey Kong* should feel right at home here. Yes, it's a simple painter game in reality, but it's a very playable one at that and it really does have that frantic feel of an early arcade game – and it looks awesome. The only downside is the in-game audio, which results in the usual farts and beeps of a 48K game, but as there isn't a 128K version I couldn't really expect much more from the beeper.

Dean Swain



CRITICISM

• The Nirvana engine, also used in *After Ego 2*, impresses here once again with stunning multi-coloured graphics throughout. The game lacks music though, so the ambience found in *After Ego* is missing – just some blops and burps as you clear each level by switching on all the light bulbs. A good game although I question its long-term playability as I found that the repetition sinks in quite quickly.

Chris Wilkins

COMMENTS

Control keys: redefinable
Joystick: Sinclair
Keyboard play: very responsive
Use of colour: excellent, multi-colours in one 8x8 character square
Graphics: small but beautifully drawn and animated
Sound: Great title track, spot effects in game
Skill levels: Progressively harder
Lives: 5
Screens: 40
Special features: Nirvana engine graphics
General rating: A simple game, well above average

Use of computer:	90%
Graphics	85%
Playability	87%
Getting started:	90%
Addictive qualities:	80%
Value for money:	N/A
Overall	84%

POPEYE

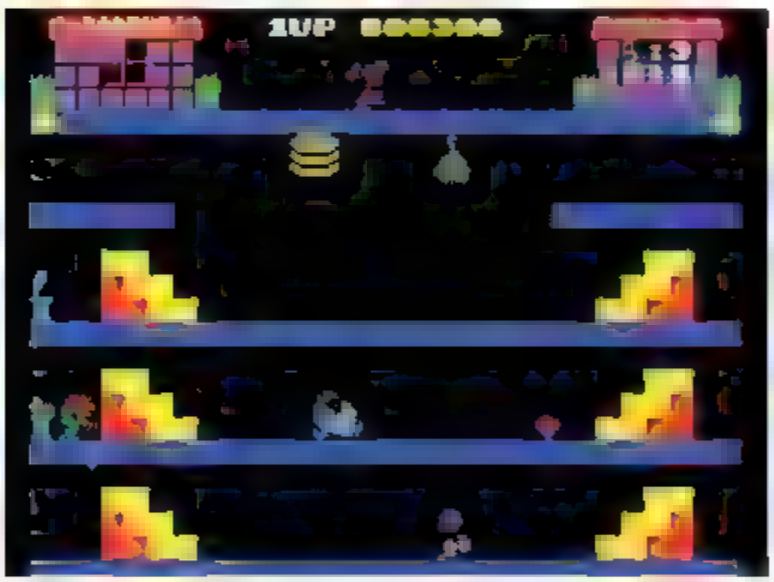
Publisher **Not known**
Memory required.
48K/128K
Language **Machine code**
Author **Gabriel Amore & Alessandro Grussu**
Released. **2016**

As this is no surprise an unofficial version of the *Popeye* arcade game (Nintendo, 1983), you're probably already aware of the premise.

The aim is for Popeye, moving up and down the four levels on the screen, to collect hearts thrown down by Olive Oyl while avoiding Brutus. He throws punches and bottles at Popeye, and watch out for the Sea Hag who resides at the edges of each level. To defend against these two, Popeye needs his trusty can of spinach.

Despite the feature of the punch button, Popeye cannot attack Brutus or the Sea Hag directly. Punching is used both to destroy the bottles before they hurt Popeye and to gobble down the cans of spinach.

A punch bag is available, and when it's hit it releases a cage that should Brutus be underneath at the right time - traps him for a few seconds, which gives you a bit of a breather from the chase. To complete each level, collect all the hearts.



CRITICISM

• It looks pretty, but it's way too hard to play. Due to Nirvana's constraint of moving only one character at a time, the sprites are too small to be able to avoid bottles, Brutus and the Sea Hag. It's also tricky to move around the play area in a way conducive to completing a level and I found myself missing the stairs that take you between the levels. I couldn't even complete the first screen despite repeated goes.

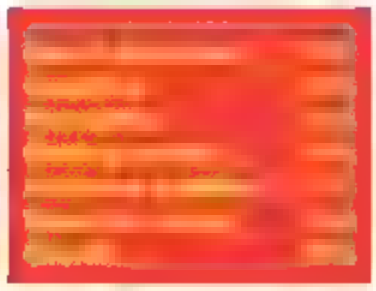
Had there been some proper play testing before release, maybe the first screen might have been easier in order to ease the player into the game more gently and *Popeye* would have been more fun to play. As it is, it's just infuriating when you lose life after life.

The music is grating: a single continuous in-game 128 tune that doesn't really go anywhere and uses only one channel. This is probably the best version of the arcade game on the Spectrum but then, there's not much competition.

Mark R. Jones

COMMENTS

Control keys: Q, A, O, P, M
Joystick: Kempston, Sinclair
Keyboard play: Responsive
Use of colour: Looks nice
Graphics: Nice but small
Sound: Simple tune, plus 48K spot effects.
Skill levels: 1
Lives: 4
Special features: Written with *Arcade Game Designer*, Nirvana engine graphics
General rating: Give it a go if you're a fan of the arcade game



DONKEY KONG Jr.

Publisher **Fan made**
Author **Gabriele Amore**
Memory required **48K**
Released. **2016**

Although the classic arcade *Donkey Kong* was ported to the Spectrum, the Speccy also hosted a few naff knock-off/clone games. *Donkey Kong Jr* has also been replicated a few times since its 1982 debut and this release is the most recent for the Spectrum.

In terms of the story this version doesn't deviate from the original arcade game, so you're in control of Donkey Kong Junior who's attempting to rescue the caged Donkey Kong from Mario – Mario's taking revenge on DK Senior for kidnapping his girlfriend Pauline in the first game.

Avoiding various obstacles such as birds, the lethal crocodile-like Snapjaws and the ever-present water, DK Junior faces four levels to navigate to rescue his father from Mario's clutches.

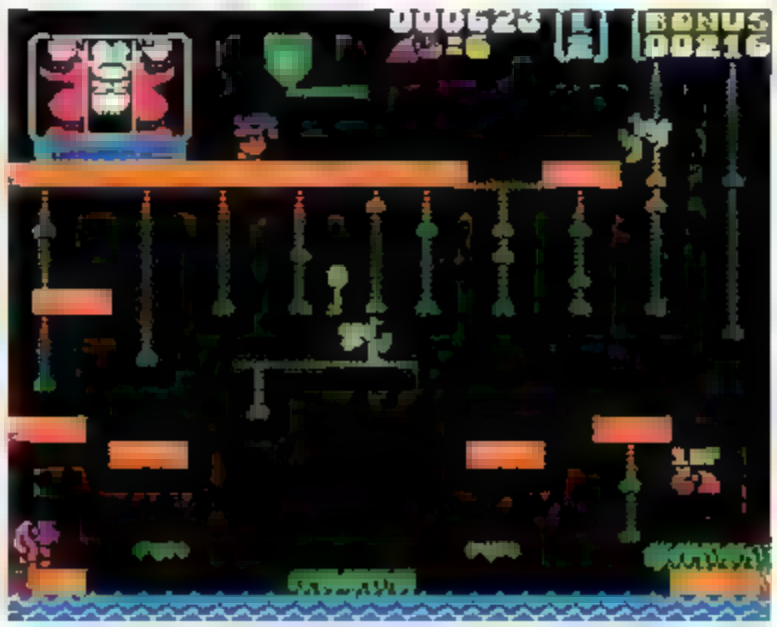
CRITICISM

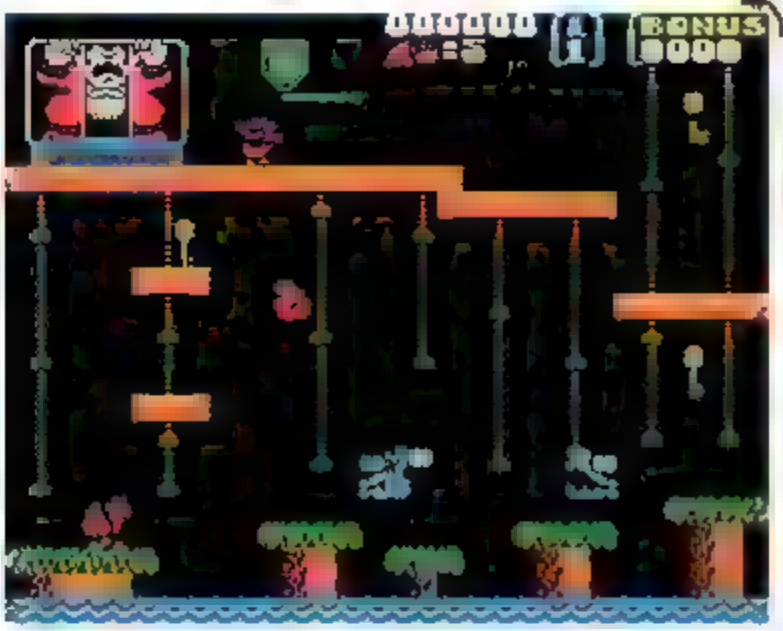
• *Donkey Kong Jr.* has nice bright graphics, but that's probably the best thing about it. The character sprites are distinctive and I love Junior's animated death as he falls and drowns.

Controls feel unresponsive at times – Junior sometimes doesn't move at all and then suddenly jolts to a new screen position, kind of like a character in an LCD handheld (Remember those?)

Some gameplay elements differ from the arcade version and the game really suffers for it. There are enemies in the game known as Snapjaws, which unlike the arcade version, don't climb down vines and cross the ground but instead seem to float in mid-air at times on random paths, often killing Junior because their movement is unpredictable.

Another problem is that you can only hang onto a vine's





right side instead of hanging between two as in the coin-op. Due to my familiarity with the arcade version, I lost many lives because I kept forgetting these limitations.

There's no backing music either. The arcade version's music wasn't as memorable as the original Donkey Kong, but a familiar jingle always adds to any game. There is little to break up the silence here apart from when you fall in water or touch some fruit.

Gabriel Amore has released many great Spectrum games, but this isn't one of his best. That said, it is the closest that anything has come to looking and feeling like the original arcade game on the Spectrum, so it isn't a bad

Ryan 'Riot' Coleman

CRITICISM

▪ Games are meant to be fun – this is pure hair pulling frustration as you have to move DK Jr in a pixel-perfect manner around the screen. The game feels like a Game & Watch affair since the graphics are functional with limited animation. Though it looks the part, *Donkey Kong Jr.* is way too hard to be fun and you soon find yourself looking for another more soothing and satisfying game to play.

Chris Wilkins

COMMENTS

Control keys: Fixed
Joystick: Kempston, Sinclair
Keyboard play: Okay for the most part, occasionally unresponsive
Use of colour: Bright and appealing
Graphics: Basic but nicely detailed sprites
Sound: Minimal and lacking music
Skill levels: 1
Screens: 4
General Rating: Certainly it could be worse, but we'd rather the original any day

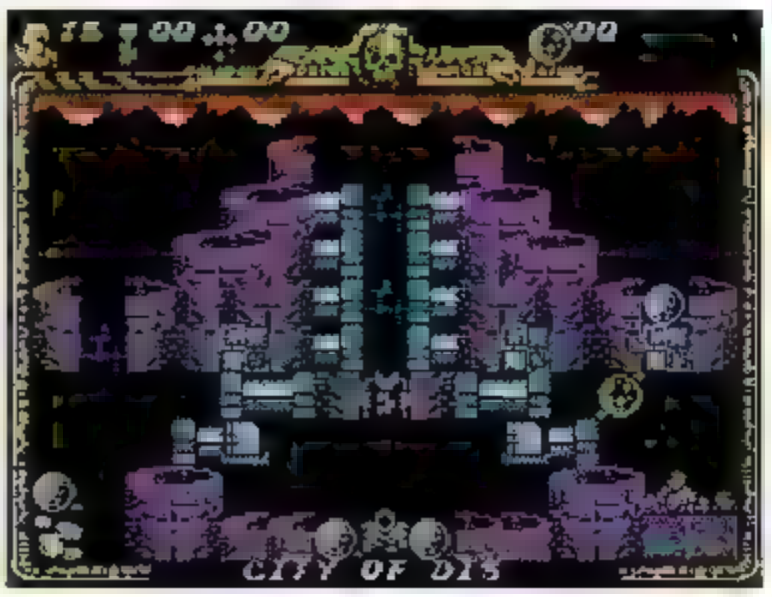
Use of Computer	
Graphics	
Playability	
Addictive Quality	
Overall	

GODKILLER 2: EXILE

Publisher: **Silent Software**
Author: **APSIS aka Cthonian Godkiller (Maxi Ruano)**
Memory required: **128K**
Language: **C-z88dk (Mojon Twins' La Churrera)**
Released: **2015**

In this, the second part of the Godkiller series, the protagonist has been stripped of his deity-vanquishing powers. Removed from time and space, he's dumped squarely in the demonic city of Dis (which shares its name with the city in Dante's *Divine Comedy*). It represents the sixth through ninth circles of hell, an inspiration clearly apparent in the look and feel of the graphics. Surrounded by guardians of the underworld, you take on the role of the titular Chthonian Godkiller as you explore the map in search of 15 lost souls and three mystical artefacts. Recovering these items enables you to reconnect to the primary source of the universe and exact revenge.

One of the latest in the long line of games developed with the aid of the Mojon Twins' Churrera game engine, *Godkiller 2: Exile* shares many game mechanics with *Land of Mire Mare*. Enemies include skeletons and deathly knights who guard various areas, and a number of gates bar progress until the keys to unlock them are found. Portals, strewn around the map, transport you to other locations. The large map and its labyrinthian nature mean there's plenty to explore. Side A of the cassette contains the game, while side B provides some welcome backstory presented in a slideshow format. An impressively put together (and spoiler-free!) image of the game map is also included and is recommend-



ed to have close by as you play.

The first screen provides a power-up, granting you the ability to fire magical energy bolts at enemies, but after that you're on your own.

CRITICISM

• *Godkiller 2: Exile* is heavy on atmosphere and exploration, but it requires quite a bit of trial-and-error to get through.

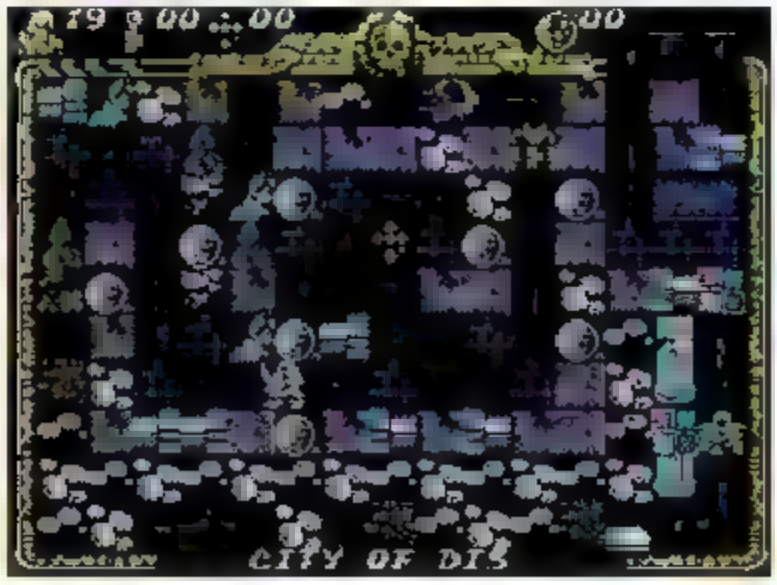
The presentation is both good and 'could do better' in equal parts. The inlay, map and background story are fantastic but there's nothing in the way of a controls list included. The M key is necessary for picking up items and activating portals (even when you're using a joystick) and the only way to know this is either through a visit to the website or by uncovering this fact accidentally.

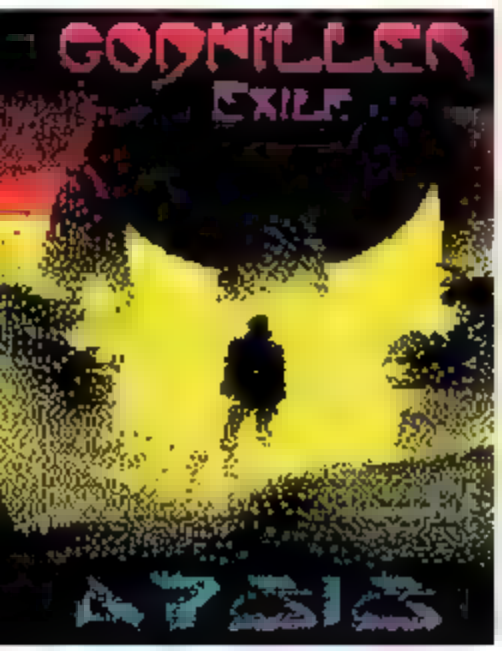
The impressive map looks organic with its bushes and rocks, but the collectable items blend in too well with them. Certain tiles at the far north of the map hide parts of the player character when you walk by, and although you can move in eight directions, you're only able to fire the magic bolts in four directions.

While the game makes use of the full screen, having more than two sprites moving around causes it to slow down – there's a good reason why the classics tended to use two-thirds (or less) of the screen in order to keep things running smoothly. Last, the unique items you need to collect respawn in their original positions when you leave and re-enter the area.

After selecting your control method and starting the game, you may feel a bit lost – no modern-day handholding here. *Godkiller 2: Exile* has the potential to be a great game but loses a few points due to its rough edges. I'm looking forward to the final part of the trilogy and hope that some of the issues here have been addressed in the forthcoming sequel.

Neil Ebrey





CRITICISM

• *God Killer 2* has an attractive graphic appearance (with some exceptions, see below) – albeit each screen can sometimes be a little bit busy with background graphics hiding objects that you need to collect. This is another game that would really benefit from a 128K tune warbling along in the background as you play – there's a reasonably good tune on the menu but then deathly silence ensues, other than footsteps and basic effects. The game engine slows down with very little happening on the screen and the animations of the baddies don't match the splendour of the rest of the graphics – little failings that let the overall feeling down.

Chris Wilkins

COMMENTS

Control Keys: Q, A, O, P, SPACE (and M!)
Joystick: Kempston, Sinclair
Keyboard Play: Responsive movement and action
Use of colour: Nice vibrant colours, but some items are hard to see
Graphics: Great character and enemy sprites. Scenery has a distinctive architecture
Sound: Neil Parsons' catchy, wistful AY title track does a good job of setting the mood. Basic spot effects throughout
General rating: Potentially great game let down by a few simple oversights, like lack of in-game music

Use of computer:	66%
Graphics:	
Playability:	
Getting started:	
Addictive qualities:	
Value for money:	
Overall:	

48K SINCLAIR ZX SPECTRUM

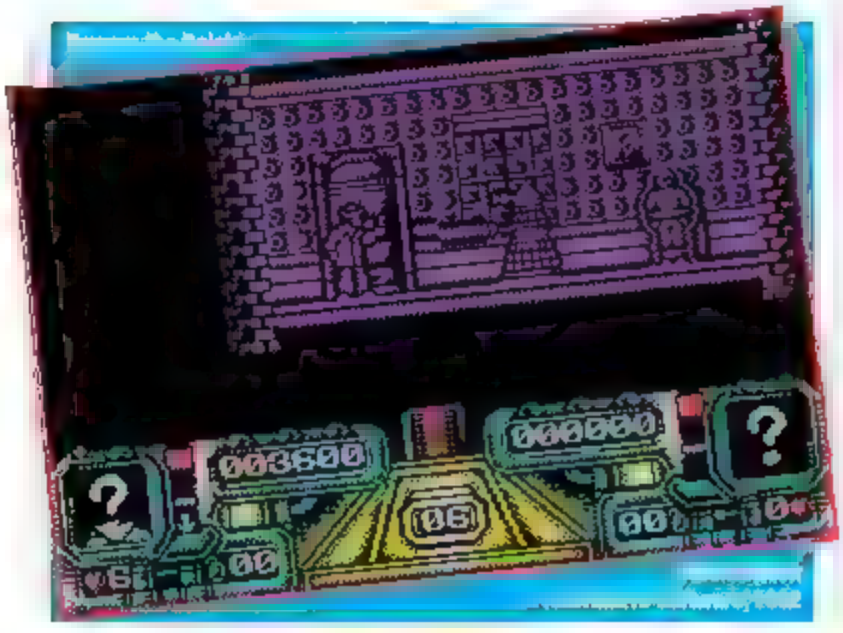
DINGO

"DINGO" available to download for free from the World Wide Web
& all defunct software retail outlets.
Spectrum version 2011 Tardis DK.
Original idea by Ashby Computer Graphics 1983.

Everyone at CRASH Towers knew it. Lloyd knew it. Oli knew it. Roger knew it. Even the olibugs knew it. We all knew it had to end at some time. The Sinclair ZX Spectrum had had an incredible run. From April 1982, and for well over a decade to come, games were being steadily released for this marvellous little computer. It saw new and more powerful models of itself finally materialise. It saw the rise of the 16-bits. It saw the rise and fall of the SAM Coupé, a misguided stab at extending the life of the 8-bit computers. It saw buyouts, takeovers, companies blossoming, and then imploding. Fortunes made – and fortunes lost. For CRASH, of course, the end had come earlier in the spring of 1992, our final issue, the tumultuous, tearful, number 98. We couldn't quite make a round hundred. The disk-based Spectrum +3 had already been discontinued by Amstrad since 1990, the rumour being because it conflicted with its CPC range. The +2B, tellingly not seen as competition for Amstrad's own original brand, also limped on until 1992, no doubt pushed into the hands of children much younger than the previous decade's Speccy fans had been. Then, in the following year, 1993, it all ended. Or so it seemed.

1993 – The End (officially, anyway)

After thousands of games, published over eleven years, by scores of programmers working for dozens of software houses, the final original commercial piece of software from a major software house was released this year for the ZX Spectrum. With a lack of chronicling from CRASH, it's generally assumed to have been Alternative's *Dr Who* licence, *Dalek Attack*, reviewed in the July issue of the only remaining Spectrum magazine, *Your Sinclair*. Subsequent issues of our former great rival contained a pitiful handful of re-released games, or no reviews at all. Out there, beyond Speccy land, there were Commodore Amigas, Atari STs, Sega Master Systems and Mega Drives and Super Nintendos, all boasting full-colour graphics, zero attribute clash, marvellous multi-channel sound and virtually no loading times. Lloyd had always said they were fanciful machines, all glitz, no substance, and overpriced compared to the Spectrum. In the end, when the price of these rivals inevitably came down, the Sinclair computer had no answer. Yet it wasn't just our beloved machine that had lived its life; by now, no high street stores were accepting 8-bit games of any format. It was a sad time to be a Spectrum owner, but it was not the end. Not by a very long shot.



1994-1997 – What Now?

Adventure games had always been the sharpened steel backbone of Spectrum gaming. From the very first homemade efforts, to Level 9's extraordinary fantasy tales, there can't be a Speccy fan who never dipped their toes in the hazardous and mercurial world of 'where next?' and 'I'm sorry, I don't know how to do that'. That CRASH had a dedicated section for adventure games throughout the majority of its life tells you all you need to know about the appreciation for this genre. And from 1994 to 1997, it was the adventure game, specifically, Zenobi Software, that kept the rainbow flame alive. Formed in the mid-80s by John Wilson, Zenobi specialised in mail-order adventure games, an unremarkable endeavour in a decade that saw the high-

"Sometimes it's easy to forget that twenty years ago, retro wasn't really a thing."

street stores swamped with Spectrum games. From 1989 onwards, Zenobi released a huge amount of adventures, sometimes re-releases, usually original games, with a Delta 4 style sense of humour and generally firmly based in the world of goblins and oddly nerdish adventurers. It's most likely that the final commercial Spectrum game of this decade was one of Zenobi's several adventures released in 1997.

For this period, however, the real story of the Spectrum, in a roundabout way, was happening elsewhere. Since the mid-1980s, many clones of the computer had appeared in several Eastern Bloc countries, most notably Russia. With it being impractical to import the Spectrum directly, and with your average comrade unable to afford a PC, the Sinclair computer was disassembled and replicated with local parts, a cloning industry that ran unchecked across Eastern Europe

so what happened NEXT?

CRASH sent Graeme Mason to find out

The most popular of the Russian clones were the Pentagon and the Scorpion. Compatibility issues between the various computers was rife, and the playground arguments of the 80s were often repeated as fans praised their favourite Russian computer over another, rather than the previous quarrel of Spectrum versus the Commodore 64. Nevertheless, the freedom of the clone life had one big advantage: peripherals such as a disk drive were soon a valuable addition and helped extend the life of these unofficial machines. In Spain, *Micro Hobby* magazine ceased publication in 1992, but Spectrum emulators were already appearing on the cover of magazines such as *PC Mania* as early as 1993. Without the clone culture of Russia, however, even the Sinclair hotbed of Spain cooled as gamers adopted the Sega consoles, and programmers the PC.

Back in the UK, despite the small successes of companies such as Zenobi, the Spectrum was fast fading into obscurity. Two years after the release of Alternative's *Dalek Attack*, the Sony PlayStation reached our shores. As Lara Croft strode into the underground world of *Tomb Raider*, and zombies shambled around an ornate mansion, the Spectrum felt a world away, as technologically distant as Stephenson's Rocket or gas-powered lamps. A big part of the issue was the age of your average Spectrum fan from the 80s. Now in their twenties, and with a disposable income, the gaming on a budget days of the Speccy were over. A few die-hards persevered, using the Sinclair computer as a programming tool, with some even going so far as to create emulators for use on machines such as the Commodore Amiga and PC. In its home country, with the rise of the latter in the early-to-mid 80s, the Spectrum was forgotten about by most.

1998-2004

Sometimes it's easy to forget that twenty years ago, retro wasn't really a thing. Few people bar a clutch of enthusiasts were looking back on old technology with anything other than contempt or scorn. Most probably the biggest factor that countered this, and the reason for the resurrection of interest in the Spectrum and retro gaming in particular, was the internet. The World Wide Web allowed fans who previously would have been unknown to each other to group together and wallow in the pool of nostalgia, throwing the names of classic games around for others to catch and recall with a wistful grin. Fansites appeared; emulators thrived for all the 8-bit machines, with the Spectrum the most ardently followed, especially in the UK. The rapid popularity of auction site eBay began to feed the need for people to re-acquire their old hardware and games. Prices were cheap, retro gaming had still not entered the public cognizance.

WWW.CRONOSOFT.CO.UK ESTABLISHED IN 2002

CRONOSOFT

Then, in 2002, a new software house, specialising in 8-bit games and the ZX Spectrum in particular, was formed and released its first games. New Spectrum games had never actually stopped, but this time it was different. Cronosoft, devised by Simon Ullyat, would sell actual physical cassettes, just like in the good old days. The Spectrum community, most notably website World of Spectrum, proved a useful ally to Cronosoft, answering the call for games and helping with ideas and practical assistance. Jonathan Cauldwell, author of several covertape games back in the early 90s, became Cronosoft's chief creator, with several other notable names joining him as the venture gained traction. The retro scene was growing everywhere, and naturally our favourite machine was at the forefront. In 2004, Live Publishing printed the first issue of Retro Gamer magazine; its first issue carried an article on everybody's favourite cheapo software house of yore, Mastertronic. Now the community had a focus in the form of a regular publication dedicated to the hobby.

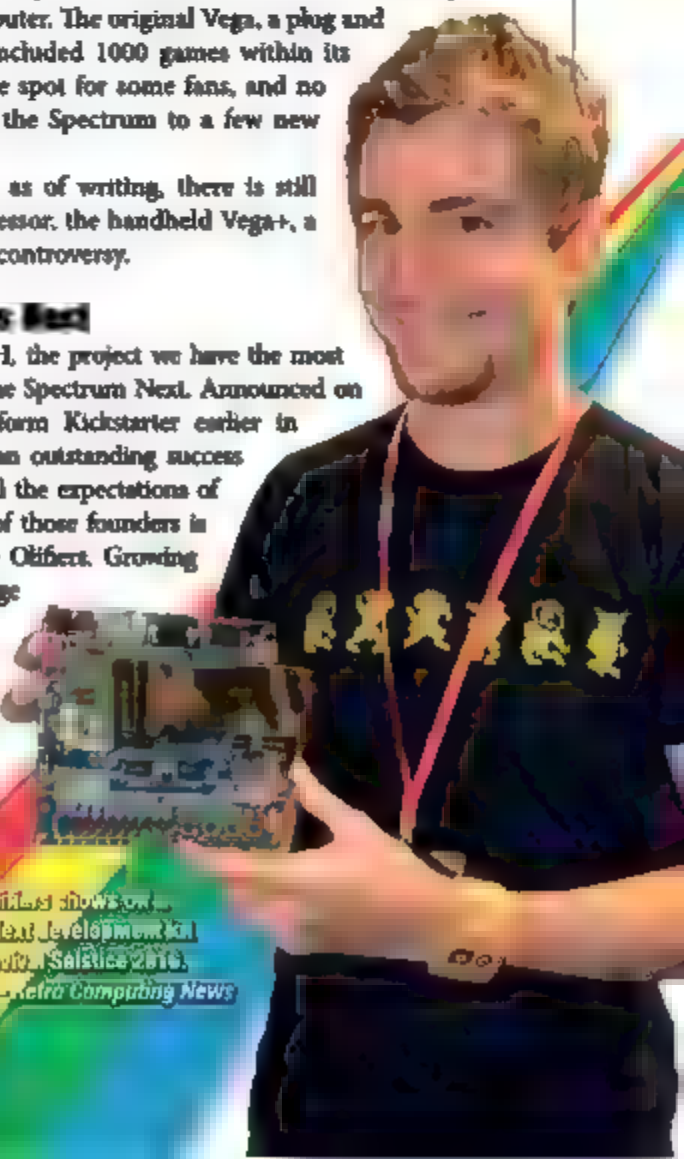
And 2008 onwards

Remarkably, 35 years after the release of the first ZX Spectrum, 25 years after the last issue of CRASH and 24 years since the last major commercial game, our beloved computer is as strong as ever, and this annual you hold in your hands is testament to the enduring admiration of Sir Clives original invention. Games are still regularly created, and theres a new version of the computer coming out early next year. Projects such as the recreated Spectrum bluetooth keyboard from legendary 80s publishers Elite - may have been misconceived or maligned, but only go to demonstrate further the enduring appeal of the computer. The original Vega, a plug and play device that included 1000 games within its slight form, hit the spot for some fans, and no doubt introduced the Spectrum to a few new followers.

Unfortunately, as of writing, there is still no sign of its successor, the handheld Vega+, a project steeped in controversy.

What Happens Next

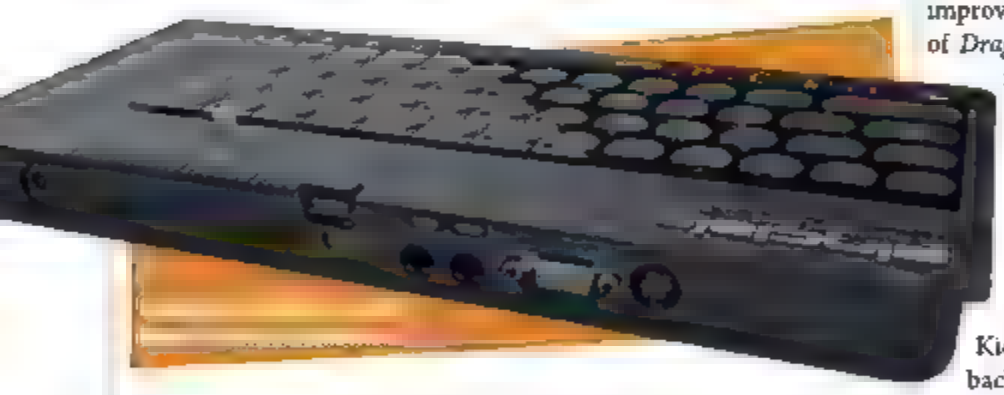
But here at CRASH, the project we have the most excitement for is the Spectrum Next. Announced on crowdfunding platform Kickstarter earlier in 2017, it has been an outstanding success so far, exceeding all the expectations of its founders. One of those founders is Brazilian Henrique Olifiers. Growing up in a small village in a remote town in South America, Henriques love of the Spectrum inevitably started



so what happened

with one of its Brazilian clones, the TK 90X. 'I couldn't get hold of much software either,' says Henrique. 'So had to start writing my own. Some of my friends liked what I was doing, so I started selling copies to them.'

Henrique's first game was a 'lemonade stand simulator' which sounds like something Codemasters would have been proud of, before being a big fan of the shoot 'em up *Zynaps* (aren't we all?), he coded a clone of Hewson's famous game. A chance meeting with hardware hacker Victor Trucco began a chain of events that culminated in this year's Kickstarter campaign. Explains Henrique, 'Victor and Fabio [Belavenuto] are both retro hardware hackers. They came up with a replacement Spectrum board, the TBBlue [*named after their initials, and the fact it is, erm, blue*], and this proved quite popular in Brazil. They called me December 2015 enquiring if I could help them to bring it over into the UK. They wanted to make it better, include some more features, so it occurred to me, that what was interesting about the original Spectrum was its design, you opened the box and everything was there. All you had to do was hook it up to the cassette player and you were there. So I felt they were missing the point, the emotion that people remember, an iconic design upon opening the box.



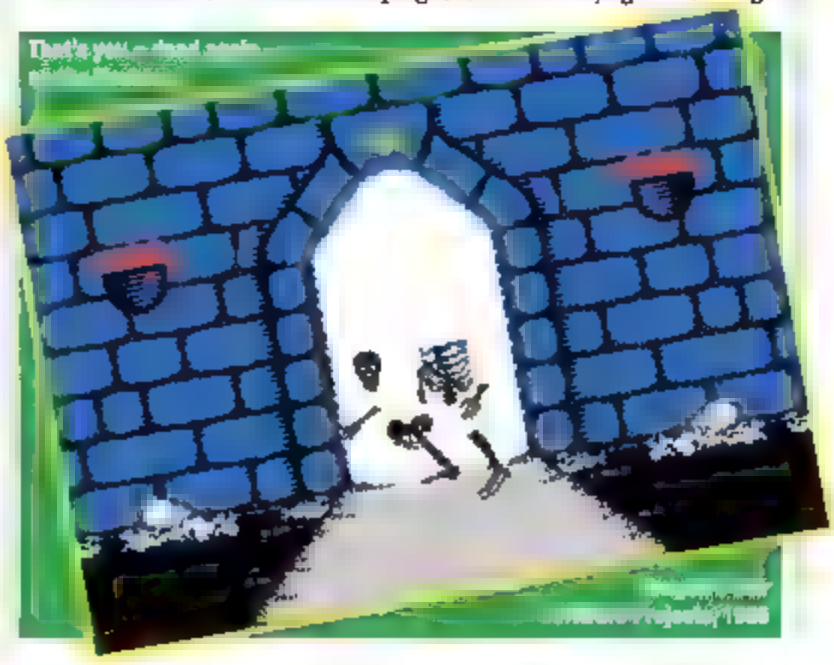
Henrique's counter proposal to his friend was a completely redesigned case, containing the board and a host of other new features. 'Fortunately I had a friend who works at Sky, the owners of Amstrad,' he continues. 'So it was easy for me to reach out and discuss the rights to the Spectrum name.' The next vital piece was the computer's look, and there was a short list of one when it came to potential designers. 'My first phone call to Rick Dickinson, he was having a skiing break in Switzerland,' chuckles Henrique. 'Fortunately, the legendary Sinclair designer readily agreed to help with the Next, despite having his holiday interrupted. His role is basically to be inspired, by the original design, but update it to a new look and feel.' To those harking back to the first ZX Spectrum, alas the rubber keyboard went out of the window early, bouncing down the street of computing history. 'No-one will put up with that anymore,' grins Henrique.

The key to the Next is combining the old with the new. The computer can quite easily be used exactly as a Spectrum was back in the day. 'Got a huge collection of Speccy games on tape you want to play? No problem, the Next has a socket for connecting a tape player.' But where the computer really comes alive is its extra features,

as Henrique confirms. 'The biggest one for me is ease of use: turn it on and it is immediately all there, with no need to load an OS or anything. Secondly, the fact we can move from old storage such as cassette or disk, into an SD card, which is almost instantaneous. That's a big step up for me, as now you are no longer restricted to a certain memory: you can put a four or eight gigabyte SD card in and stream music or videos.'

In addition to new games taking advantage of these new features, one of the most exciting potential applications for Henrique is the improvement of older games. 'Imagine now we have a proper version of *Dragon's Lair* on the Speccy? Or games such as *Driller* playing faster, and at full frame?' Thirty years after the majority of Spectrum games were coded, the original developers now have the opportunity to realise a vision that was often hamstrung by the technological restrictions of the time. And the design – it's eye-catching, and certainly of Spectrum heritage, says Henrique. 'You can put it next to an original Speccy, a Spectrum+ and 128K, and they all look like they fit together. We're very proud of Rick in that regard.' The original Kickstarter campaign for the Spectrum Next set the bar at 250 backers/machines. When it passed this target within 36 hours, its creators knew they were onto something special.

'When we started the campaign, we'd already gone through



NEXT?

three prototypes, says Henrique. 'But we've faced a few unexpected problems. For example, one of the tiers that was unlocked was memory sockets, so you could upgrade the memory without having to solder anything. All well and good, until we began to source components to build it, and find out the last time anyone made those sockets was 14 years ago.' Luckily, the team found a company that still possessed the original moulds they required, and the sockets are going ahead as planned.

Back in CRASH's heyday we had Lloyd's oft-controversial letters pages. Today, we have a new form of social media, and it's there where

"The rubber keyboard went out of the window early, bouncing down the street of computing history."

dissenting voices have surfaced over the multitude of extra features the Next is proposed to have. 'It's impossible to please everybody,' laments Henrique when we put to him the complaint that the design is moving too far away from the original Spectrum for some backers. 'The Next was always proposed with two premises: first, that it had to be completely retro compatible; and second, as it is called the Next, it should be the machine that we hope Sinclair would have launched to compete with the 16-bit machines. So that was always the intention, and I'm a little puzzled because you have two different modes, right? It still boots like an original Spectrum, and if you don't like the new features, so be it. Or you can boot it up, with the new features and use them as you wish.

The ZX Spectrum Next is currently due to ship to backers in January 2018. How does Henrique see its role in the future? 'I hope that in ten years it will still be around, and the standard for all things Spectrum. The developers we are working with are very excited, and feel they are back dealing with something they have missed. It's simpler, easier to control, and I hope it will become a hobby for developers, the end result being games that everybody can enjoy. But beyond that, I really like the idea of kids getting in touch with the Next. I'm a superfan of the Raspberry Pi, but it's not necessarily an easy proposition for youngsters. With the Next, you put it on and you are straight into BASIC. Let's see if there's a demand in the future. If so, I'll be happy to pass it on to a company that can keep the Next on the market.

Henrique's parting shot is an encouraging one, whether this happens or not, it's clear the Spectrum, its fans and community, is as strong as ever. Here's to another 35 years!

sinclair

ZX Spectrum Next

For more information on the Spectrum Next, please visit www.specnext.com

YOU CAN'T KEEP A GOOD *EGG* DOWN!

Philip and Andrew Oliver always said they would never do Dizzy again, but a fortuitous culmination of several events during the Easter of 2017 inspired the creation of a new game – *Wonderful Dizzy*. Philip tells the story...

The year started with a 30th Anniversary logo of Dizzy, produced by Piotr 'PIT' Gratkiewicz. This led to several magazine articles and the opening of the Dizzy Eggshibition at the National Videogame Arcade in Nottingham.

Following the successful 2015 release of the found-in-the-loft *Wonderland Dizzy* on NES, at the opening of the Museum event on 8 April 2017, we announced a second found-in-the- oft Dizzy game – *Mystery World Dizzy*.

A week later and completely out of the blue Dmitri Ponomarjov contacted me via Facebook from Estonia to say he planned to release a new version of *Crystal Kingdom Dizzy* for the Spectrum 128K. He and some friends had recreated it from scratch over two years. 'It's been a really interesting experience to make a new Dizzy game in 2017,' he told me. 'I first saw Dizzy when I was nine years old, it was *Treasure Island Dizzy*.'

I thanked him politely thinking it would be another average Dizzy-fan game. But on Easter morning I read several positive articles about the new release and one contained a video link. We were blown away with the quality. It was much better than the original in terms of graphics, use of colour attributes and the smoothness of the sprites. We got back to Dmitri, praised him on his team's work.

At the same time, Henrique Olifiers launched the ZX Spectrum Next Kickstarter campaign: a new machine, fully compatible with the original computer, and packed with improvements and expansions. It had a massive backing and flew past its initial goal very quickly. Henrique is a friend of ours and we thought it would be nice to be involved in some way.

Andrew and I chatted about this at work (35 years working together and we still have desks next to each other) and concluded that it would be cool if we designed a new Dizzy game for Dmitri and his team to make and launch on the Spectrum Next.

It probably wouldn't have come to anything were it not for a sleepless night wondering what such a Dizzy game should be. While thinking over possibilities, settings and puzzles, I suddenly had a eureka moment – what if we based it around the *Wizard of Oz*, with the Yolkfolk taking on all the different roles? I spoke to Andrew about this in the morning and he agreed: it made perfect sense. If we were ever to do a new Dizzy game, the stars were never going to be this well aligned again.

Putting the team together

I put together a short summary of the concept in under an hour, sent it to Dmitri, Jarrad, and Piotr, asking if they'd like to help make this dream a reality and they all said yes. Andrew contacted Henrique, and he was excited at the prospect enough to offer free Next development kits to those working on the game.

The characters

Having decided on the *Wizard of Oz* theme it was time to work out exactly what that meant. In the original Dorothy was the protagonist but this would have to be Dizzy. He would have to meet the Scarecrow, the Tin Woodman and the Cowardly Lion. Obviously we had to feature the four witches. The Wicked Witch of West set on vengeance after Dizzy killed her sister, The Wicked Witch of the East by landing a hut on her and the Good Witches of North and South. Of course, the story wouldn't be complete without the Wizard of Oz and the Munchkins.

We decided to cast Yolkfolk in the various roles: Dozy as the Scarecrow; Denzil as the Tin Woodman, Dylan the Cowardly Lion; Daisy the Good Witch of the North, with Dora as the Good Witch of the South. Dizzy's nemesis has always been the evil wizard Zaks, but in the Wizard of Oz his enemy is the Wicked Witch of the West, but we based her appearance on Zaks. Oh and Pogie, Dizzy's pet fluffle, could play the role of Toto.

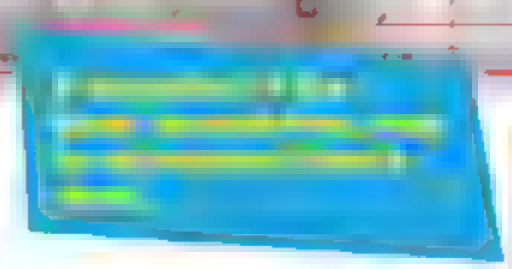
Location, Location

Clearly the game has to start in the Munchkin Village, a safe place in which players can get a briefing of what challenges lie ahead of them.

There's the Emerald City, which is home to the Wizard of Oz and the castle of the Wicked Witch of the West. We also introduced homes for both of the good witches. The Crystal Palace for the Witch of the North and Ruby Chateau for the Witch of the South.

There's the Yellow Brick Road, the Red Brick Road, the Poppy Fields and the Haunted Woods of course. Also, expanding out the world we've introduced a few new locations like the docks and the caves.

It really is quite amazing how well the *Wizard of Oz* story fits with the requirements of a Dizzy game!



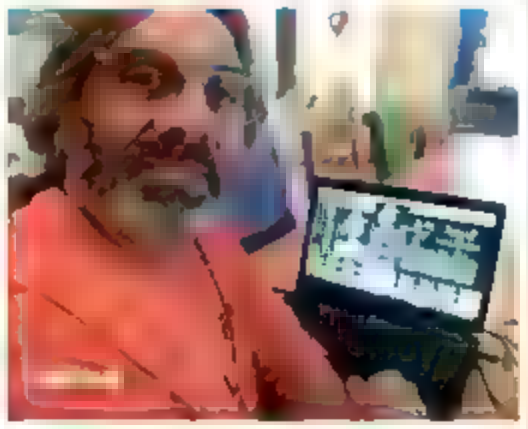
Going into production

While we worked out the full design, we enlisted the passion and skills of a very talented group to make the game a reality. We roughed out the key areas on paper and then turned this into an *Excel* spreadsheet – one cell per location. Then we sketched a screen layout for each location, scanned them in and put them into the spreadsheet.

We thought up lots of puzzles and input small images into the Spreadsheet, overlaying them onto the correct locations. We did the same for the characters. Then added lots of arrows indicating where items needed to be taken. Alongside this we created a Google doc which described all the characters, the puzzles, the key locations' features and all the dialogue. This we then shared with the production team.

A very international team

Based in Estonia, **Dmitri Ponomarjov** is responsible for most of the in-game graphics and also managing the production team. A Spectrum fan for 20 years, he feels it shaped his preferences in cultural and art aesthetics. One of those memorable games was *Dizzy – The Ultimate Cartoon Adventure* which motivated him to learn English even before starting school. He says he was fascinated by the visuals of the first Dizzy game: 'When I saw the crystals on the loading screen, my



Marco Antonio del Campo Gómez, based in Spain, created the loading screen, Poland's **Piotr Gratkiewicz** created concept sketches of the game's characters, opening and closing graphics and the logotype and poster. Meanwhile, British **Jarrod Bentley** is responsible for many of the in-game sprites.

magination was overwhelmed, and when I later saw the crystals in-game, that one small feature became one of the biggest cultural influences. I don't really know why.

Evgeniy Barskiy lives in Novosibirsk, Siberia. He's responsible for the programming. His computer hobby began at the age of 12. He learned to program by trying to fix Spectrum games and eventually graduated from the Siberian University of Telecommunications and Information as a programmer.

Fellow Russian **Sergey Kosov** is creating the game's music, after receiving a great response for his music for Crystal Kingdom Dizzy, based on that for the Amiga version.

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PAUL KITCHING 3D

GCC

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EL STOMPO

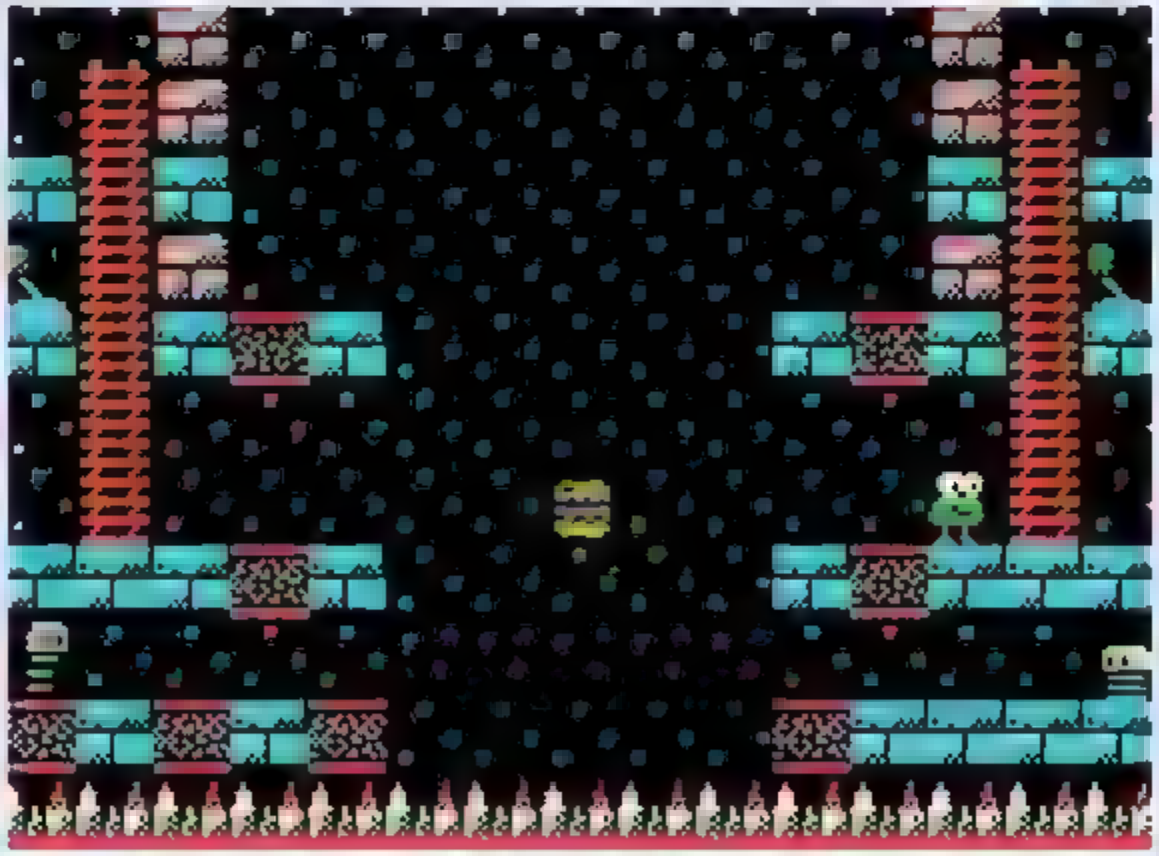
Publisher: **Stonechat Productions**
Author: **Dave 'R-Tape' Hughes**
Memory required: **48K/128K**
Language: **Machine code**
Released: **2014**

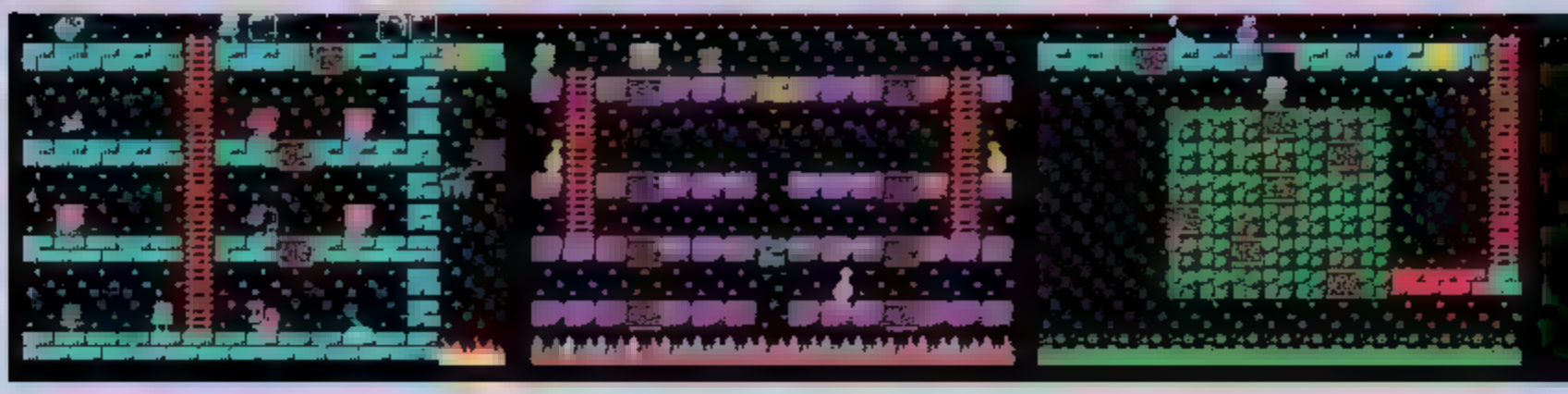
You are El Stompo a TV repair blob who employs the unique method of fixing broken television sets by stomping on them. Your job is hazardous but you have been highly trained. With a lethal mix of arcade skills and puzzles, this is a mentally challenging task. Once a telly has been stomped and miraculously repaired, it bursts back to life and proceeds to display one of four different programmes.

A number of creatures infest each level – most of them look like they could have crawled out of The Trap Door in Berk, Boni and Drut's accommodation. Needless to say, these are detrimental to El Stompo's health should he barge into one.

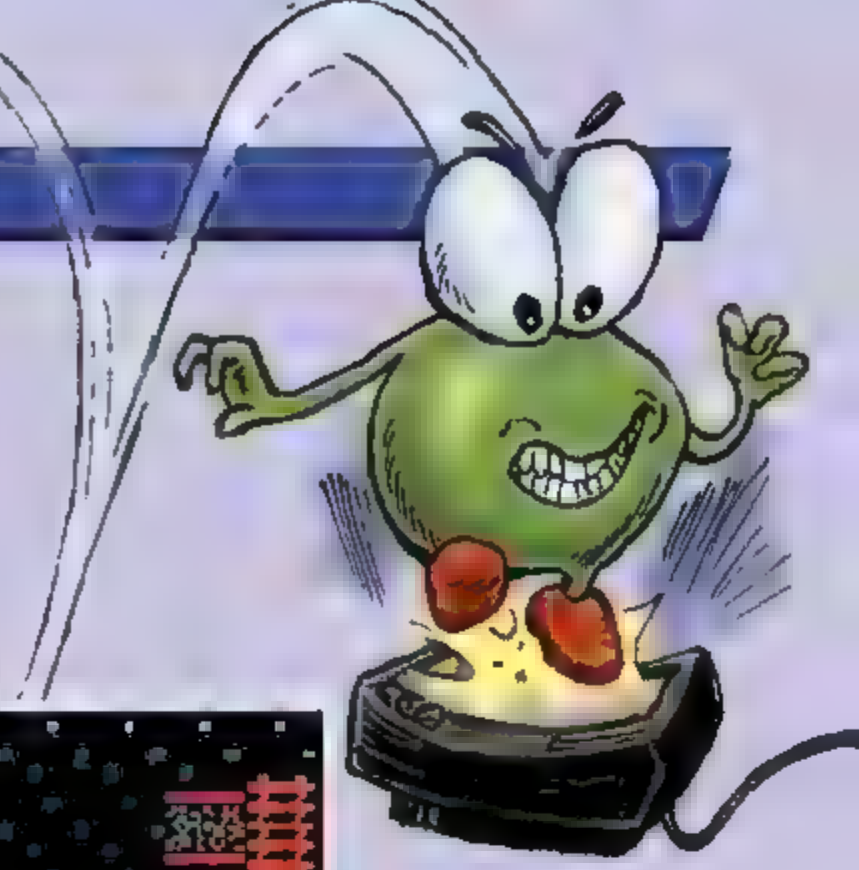
One resembles the hero, but in red. there's a kind of thing on a spring, owls ducks and others. Take care of the slug-like creature that sleeps until El Stompo is on the same level when he awakens and gives chase. Later levels introduce disappearing bridges, melting platforms, switch boxes which operate trap doors, and padlocked passageways puzzle out how to open them without leaving El Stompo vulnerable to attack.

Spikes at the bottom of some levels spell instant death should the stomping repairman fall on them. On some levels, there are creatures whose job is to guard a special object needed to complete the level and it's up to you to discover which pick up will persuade the guardians to hand it over.





EL STOMPO



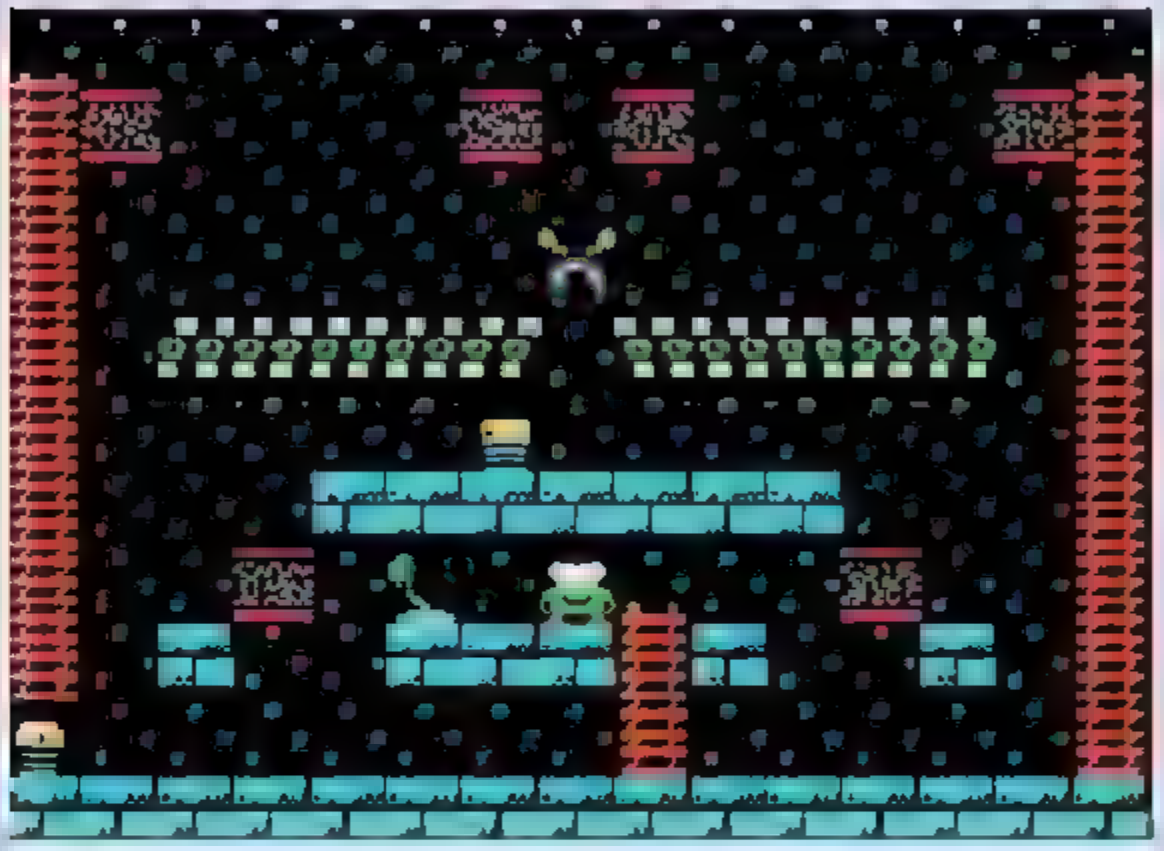
CRITICISM

• A firm slap on the top of those old CRT TV sets of the 1980s was the standard way of fixing them when they played up. In this game the hero goes one better and jumps on them.

El Stompo is a really great game, with a level of complexity in the puzzles to get the brain working. Dave Hughes has put a lot of thought into the layout and the objects on each different level. Early levels are set at just the right difficulty so that you can work out the mechanics of the game without getting too flustered. It took some time for me to realise that with each STOMP the character actually comes out four stomps before you can get him moving again. Things soon get difficult and you really have to start thinking hard before moving around.

I really like the mini TV programmes that come on once each TV has been fixed; it's a nice touch. The one thing missing is a tune of some sort – there are only some spot sound effects. *El Stompo* is highly original, a delight to play – I've spent hours with it – and it's well worth getting a copy.

Mark R. Jones



CRITICISM

• *El Stompo* is another good looking thinking man's game – just fix the TVs on each level by jumping up and down on them – simple eh! Getting to grips with your little green squidgy character can be a little bit of a test at first – he always wants to move a little further than you want him to. There aren't lives in this game, you just re-start the level if (when) you bump into the nicely animated bouncy enemies that litter each level.

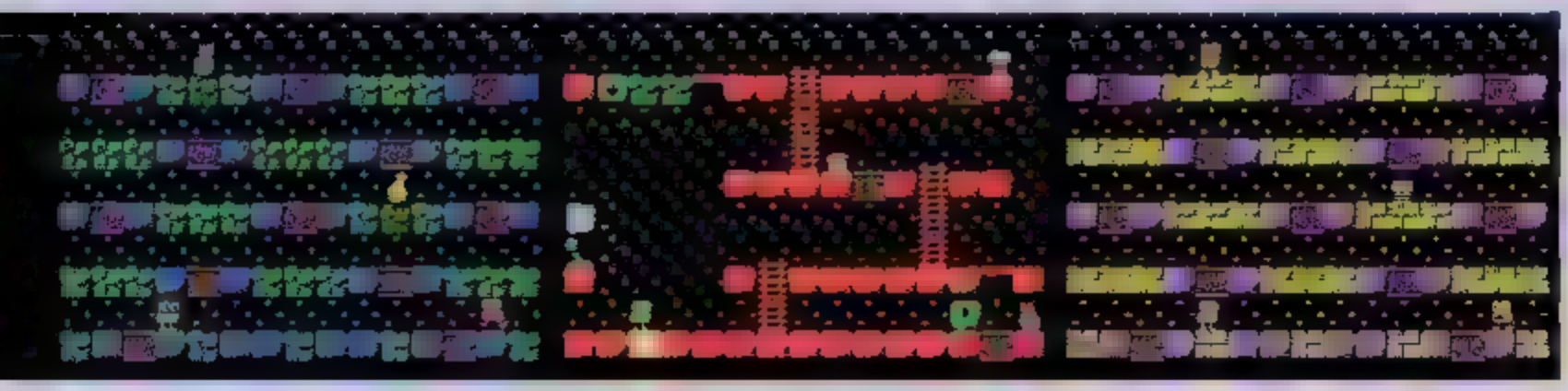
A very addictive little game this – one that can be filed in the special folder titled 'one more go, honest Guv'.

Chris Wilkins

COMMENTS

Control keys: *Q, A, O, P, SPACE* but all keys are redefinable
Joystick: None
Keyboard play: Responsive
Use of colour: Excellent
Graphics: Nicely defined and attractive
Sound: Odd spot effects
Skill levels: 1
Lives: Infinite by default
Screens: 35
Special features: Nirvana engine graphics
General rating: Great, you'd be mad to miss this one

Use of computer	90%
Graphics	91%
Playability	94%
Getting started	90%
Addictive qualities	92%
Value for money	N/A
Overall	**91%**



PIETRO BROS.

Publisher: **Noentiendo**
Author: **Cristian M. Gonzalez**
Memory required: **48K/128K**
Language: **Machine code**
Released: **2016**

Here we have an unofficial version of the Nintendo arcade game *Mario Bros.* from 1983. Creatures have been coming up from the sewer and, as a plumber, it's your task to get rid of them. To cleanse the pipeways, jump up underneath the infested platform to momentarily stun the creatures, and then run up to the unconscious foes to get rid of them once and for all.

The first few levels are occupied only by turtles, but the action soon hots up as other creatures are introduced, some requiring more than one hit to render them sufficiently docile enough to jump on and dispatch. Coins can be collected to boost scores. The POW box situated on each level that acts as a smart bomb can be used only three times per game. Timed bonus levels appear every now and again where there's a chance to collect gold coins. The game features a two-player option so you can garner some help from your brother. Be sure not to get in each other's way because you can't walk through your sibling.

CRITICISM

• As a one-player game this is a really good version of *Mario Bros*. Everything moves along at the right speed and the difficulty level seems to be set just right. The AY chip provides some jolly musical ditties and spot effects. When playing this on an emulator there's incessant screen flickering, which is distracting. This is not in evidence when played on a real Spectrum – probably some sort of timing issue is causing it. There are more severe problems when playing the game in two-player mode though. On occasion I noticed that player one had mysteriously amassed 255 lives and there was also some graphic corruption with static player graphics appearing in the play area. At one point the game did a full NEW mid-play and reset, which was very annoying. A redefine keys option would have been welcome since the default keys for the two-player game are pretty close together, resulting in the knocking of knuckles.

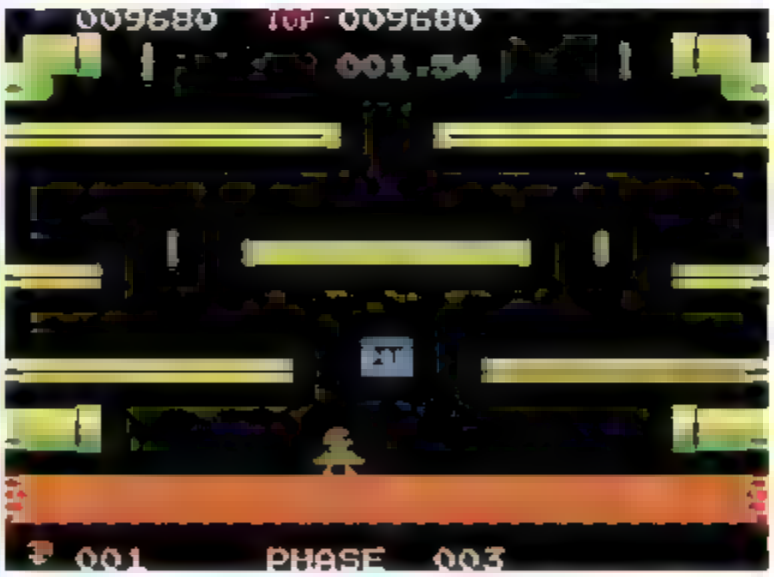
Mark R. Jones

platforms, or over enemies and the whole screen flickers at times. That and the lack of variety between levels mean it's technically impressive but not truly captivating.

Jason Railton

COMMENTS

Control keys: Player one – 6 left, 7 right, 0 jump; player two – 1 left, 2 right, 5 jump
Joystick: Sinclair
Keyboard play: Responsive
Use of colour: Excellent – more colours per character square than a Spectrum game should be able to display
Graphics: Simplistic as per the arcade game but cute as a nut
Sound: Two nice 128K tunes and in-game spot effects
Skill levels: 3 selectable game types
Lives: 4
Screens: 32



CRITICISM

• What we have here is a very pretty looking conversion of NES *Mario Bros*. The Nirvana engine is producing some great coloured sprites and backgrounds – arguably better looking than the original – but perhaps in this case it's being pushed a bit too far. The character movement is jerky making it hard to gauge jumps between the

Special features: Nirvana engine graphics, high score table and two-player option
General rating: With more spit and polish could've been great. The bugs don't help matters. As it is it's just okay.

Use of computer	74%
Graphics	80%
Playability	78%
Getting started	84%
Addictive qualities	76%
Value for money	70%
Overall	74%

BUZZSAW+
(FOXTON LOCKS MIX)

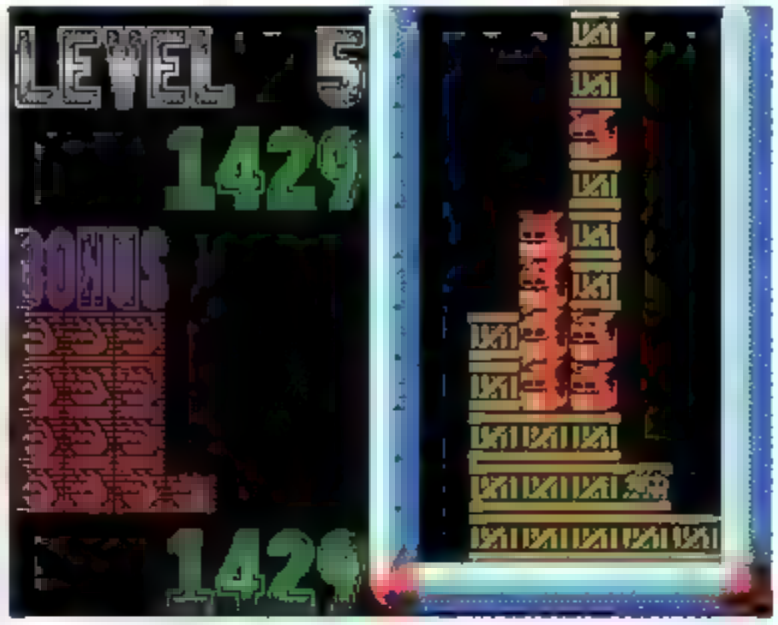
Program and graphics **Jason Railton**
Music: **Mister Beep**
Released: **2011**

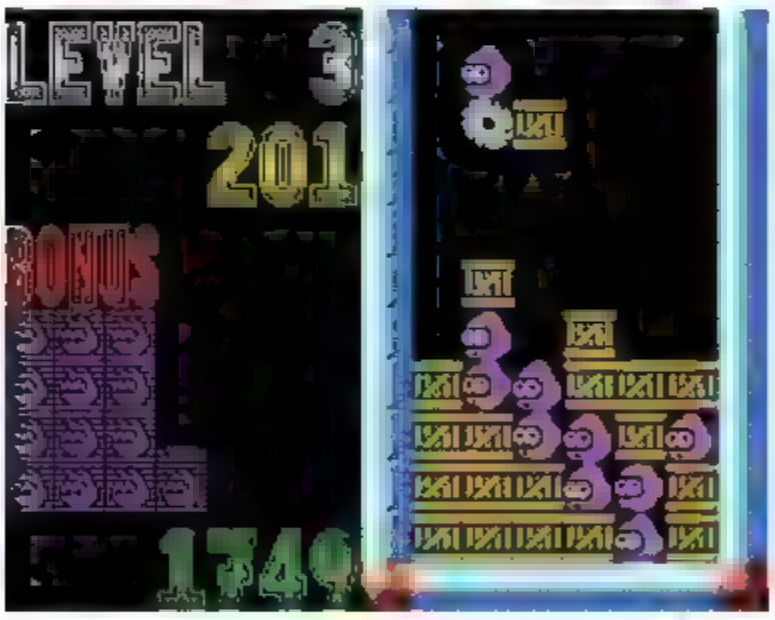
As a night watchman you are not one who asks for much in life – the odd cup of tea maybe, and just a little excitement is usually hovering near the top of the list. Aliens crashing into the packing crate factory you are patrolling is one headache you could really do without, especially as those pesky aliens have fallen into the storage hoppers. Grab your torch and legit into the factory because only your quick wits stand between the creatures and world domination.

The aliens confuse the machinery's sensors so it cannot crush them and this is where the eponymous buzzsaws come into play. Listen out for them – the revving of an engine announces their arrival just before they appear at the top of the screen.

Figuring out when to release a buzzsaw to give maximum spinning carnage is an art in itself – get it right and huge bonuses can be yours for the taking. On the other hand it's very easy to get backed into a teetering combination of crates and critters from which there is no coming back, even with spinning death on your side.

Crush enough alien scum and you are taken to further storage bins, this time with more aliens and a much faster drop rate. Things get frantic although extra help is on hand with many new ways to even the odds.





CRITICISM

• This is one of those games you might think is nothing special at first... even boring. However, patience is a virtue – it becomes great fun, and the real pièce de resistance is still waiting in the wings – just look at how beautiful the colours are and not a spot of colour clash in sight. It's a shame that the title screen's jolly music is absent during the game – and the less said about the sound of the buzzsaw the better.

Alan Hammerton

CRITICISM

• At first glance *Buzzsaw+* is another run-of-the-mill *Tetris* clone, but look beyond the surface and something much deeper emerges. Because crates, aliens and items fall in an L-shaped pattern, arranging them into nice neat rows can be much harder. Lining up crates triggers the disposal machinery to smash them up, which gives an all-too-brief respite from all the chaos falling from above.

Chris Wilkins

COMMENTS

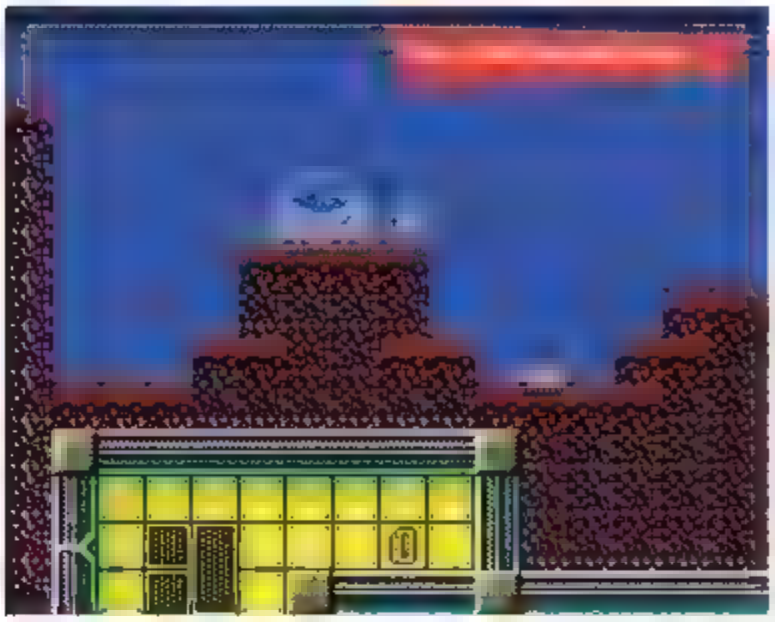
Control Keys: user definable
Joystick: Kempston, Sinclair
Use of Colour: Clever use of colour makes this game really pop from the screen
Graphics: Simple but very effective, livened up by some awesome special effects
Sound: Jolly title music but only a few spot effects while playing the game
General Rating: Technically stunning but let down a little by a lack of in-game music.

CASTAWAY

Memory required: **48K**
Retail price: **Free**
Language: **C (Z88DK)**
Author: **Juan J. Martinez**
Released: **2016**

The Castaway of the title is an explorer of the galaxy who has been stranded on a small, uncharted planet after performing an emergency landing. To get back home, he's going to need someone to help repair his craft. Time to take control of the wide-eyed Castaway and navigate through a deadly group of extra-terrestrial slugs before happening on The Doctor (or at least a Doctor). This kindly soul informs the Castaway that he's more than willing to help repair the ship, but for one niggly little problem: his lab computer has gone rogue and turned all his creations against him. So not only are you contending with the stress of violently crash-landing onto an alien planet you now have to moonlight as some crazy old doctor's IT wizzkid.

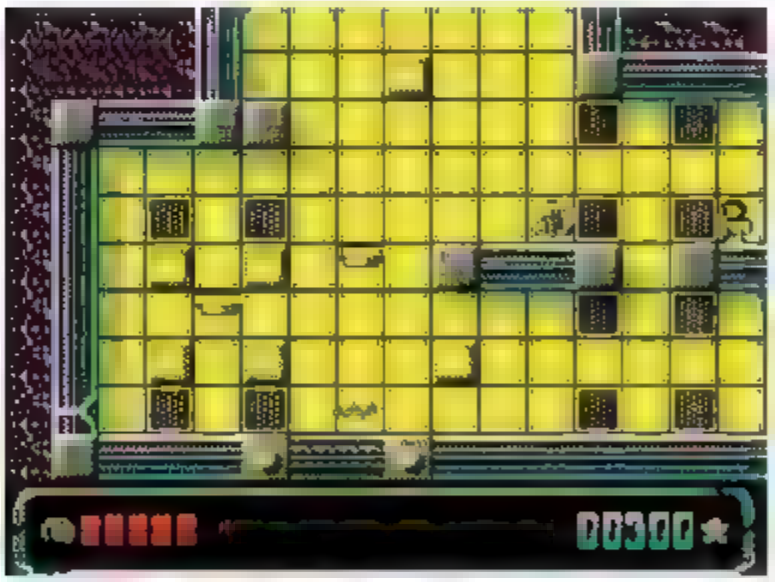
The Doc provides a key-card that gains access to his lab. The goal from here on is to reach the mainframe and shut it down. The various bio-mechanical nasties infesting the building make the task all the more challenging since



they have no other purpose than to make sure the Castaway meets a sticky end as quickly as possible.

Each contact with an enemy in the lab reduces the health bar by one (out of a maximum of five) so it's essential to avoid them to survive. On the upside, coming across a discarded blaster can even the odds. One shot from this is enough to make short work of your foes but while ammo is unlimited the blaster needs a short period to cool down after firing, during which time it's useless. In addition to the blaster, strategically placed medkits can replenish the Castaway's health, and a pair of moon boots increases jumping ability, which allows you to reach some out-of-the-way areas.

The lab is presented in a classic flip-screen style, with each screen usually having more than one point of exit. Various sections of the map are only accessible via a keycard and the game offers a couple of choices of which door to unlock first.



CRITICISM

• *Castaway's* level design is superb, featuring a few well timed and tricky jumps needed to progress. One screen in particular requires you to traverse a section via moving platforms – miss one of these platforms and you're tossed back down to an area previously navigated. It's an effective tactic to ensure you plan ahead and to exercise a degree of patience on subsequent attempts to get through.

Martinez has obviously put a lot of thought into the design of Castaway; it eases you in gently and you never feel lost as a player. The enemy movement patterns are quickly memorised (but nevertheless challenging) and when you see that Game Over screen you only have yourself to blame.

Castaway's biggest problem is that it's extremely (almost painfully) short. Most players are likely to get through it in around 15 minutes at a first sitting and subsequent playthroughs will reduce that time dramatically. Additionally, the ending feels rather abrupt.

While the game is designed for the 48K Spectrum, I'd like to see a remake for the 128K, taking advantage of the extra RAM and AY sound. Even better would be a sequel for the Next. Did our traveller make it home safely? What became of the Doctor? Castaway is a short game but nonetheless leaves you yearning for more.

Neil Ebrey

CRITICISM

• *Castaway* is an enjoyable exploration game in which you move your little (very bouncy) space man across a number of colourful screens depicting a lab on an uncharted planet in search of a mainframe that has gone bonkers. Your goal – find it and shut it down (never trust a computer I say – unless it's a Spectrum). A small adventure unfolds where moving platforms need to be negotiated, keys found and rooms explored. Great things come in tiny packages – and this is one of them (even the beeper music is quite catchy).

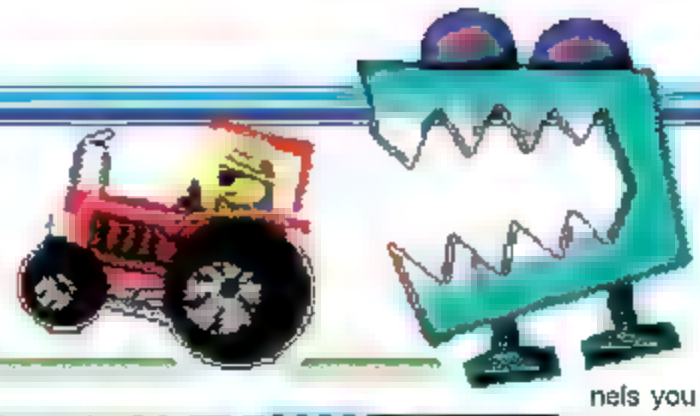
Chris Wilkins

COMMENTS

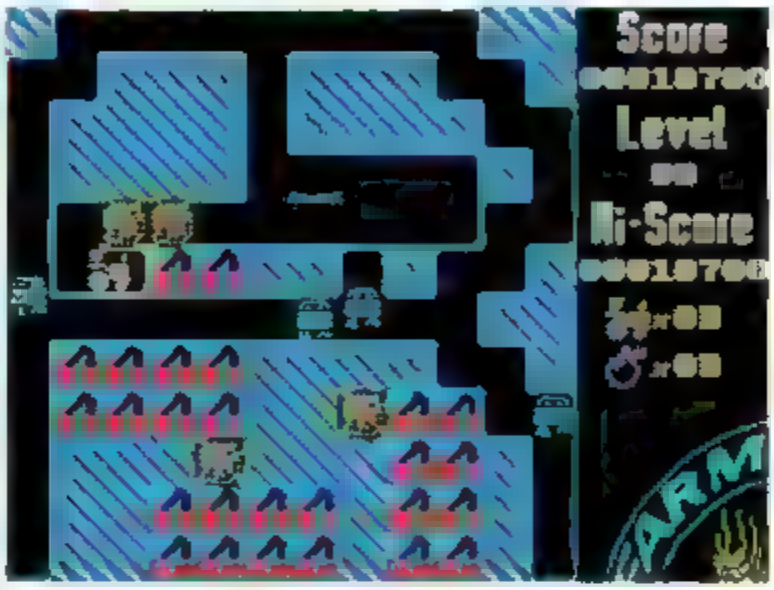
Control Keys: User definable
Joystick: Kempston, Sinclair
Keyboard Play: Works well
Use of colour: Clever use of monochrome sprites and well-defined colourful map tiles ensure that attribute-clash is eliminated
Graphics: Crisp sprites and items are immediately recognisable
Sound: Nice, original beeper tunes for the title and Game Over screens. Basic spot effects
General rating: Impressive and fun game. Keep an eye out for future releases from Mr Martinez.

Use of computer	85%
Graphics	84%
Playability	85%
Getting started	90%
Addictive qualities	82%
Value for money	N/A
Overall	70%

FARMER JACK IN HARVEST HAVOC



Publisher: **Cronosoft**
Author: **Bob Smith & Lee du-Caine,** Inspiration from **Jack Walker**
Memory required: **48K**
Retail price: **£5 tape free download**
Language: **Machine code**
Released: **2006**



What started as a hobby, with a lone demijohn of elderberry wine bubbling away in the under-stairs cupboard, has become big business for Farmer Jack in just a few short years. As a consequence the number of allotments he owns to grow the fruit he needs is getting bigger every year. But business isn't as easy this year – another supplier is flooding the market with nasty cheap wine. Last night he heard a clanging of metal, smelt the foul smell of big business and saw steel monsters roaming the allotments, trampling the paths and destroying his crops.

It's time to clear away all the fruit or destroy all the monsters on the screen to advance to the next. Boulders can be pushed or undermined to make them fall on any unsuspecting monsters or Jack himself if he doesn't nip out of the way. He also has three bombs at his disposal which explode once the fuse has burnt out – hopefully giving Jack enough time to leave the blast area before detonation.

CRITICISM

• This is essentially a version of the 1982 *Mr Do* arcade game, but with different graphics. Backdrops to each level are nicely defined, colourful but not garish. Jack's tractor and the baddies are well drawn and move smoothly without flicker. Levels start off relatively easy and get gradually more complex with progress. The music is well written and suits the type of game. *Farmer Jack* is great fun to play and has that 'just one more go' quality that makes you try to beat your last score and get that little bit further. If anyone ever does a conversion of Mr Do on the Spectrum then it will have to beat this, because Farmer Jack has set the benchmark for this genre. Superb.

Mark R. Jones

CRITICISM

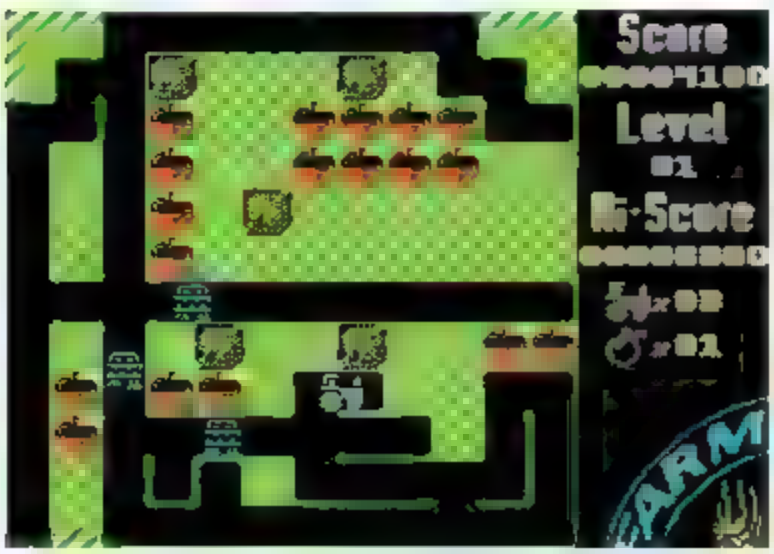
• Excellent presentation and some jolly 128K tunes make this game a lot of fun to play. Graphics are colourful and detailed and player movement is smooth. Of particular note is how narrow walls are left between the tunnels you dig, unlike so many Spectrum games of this type. The only drawback is if you overrun your positioning by even a pixel, the game automatically forces you to move over a whole tile before you can change direction, that mistake gets you killed all too often.

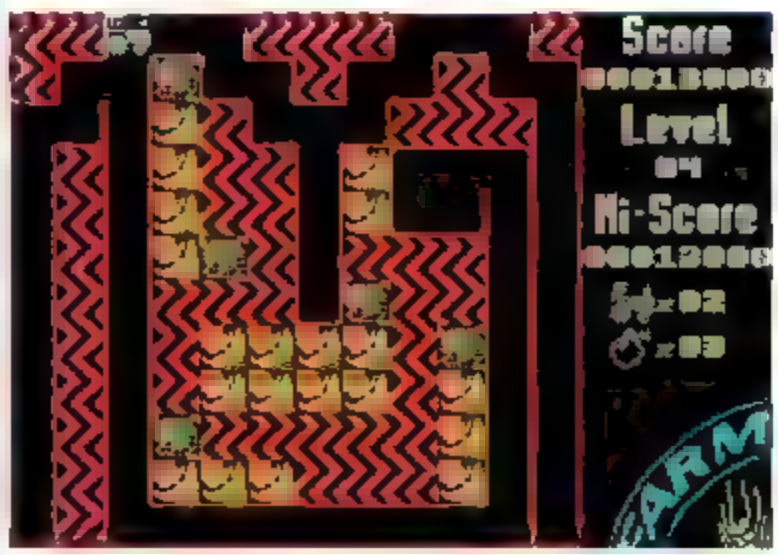
Jason Railton

COMMENTS

Control keys: K, M, Z, X, L. All keys can be redefined
Joystick: Kempston, Sinclair or Protek/Cursor
Keyboard play: Responds well
Use of colour: Very nice
Graphics: Colourful, well defined, nicely animated
Sound: Jolly 128 title and in-game tunes. Lovely AY spot effects. 48 spot effects only.
Skill levels: 1
Lives: 3
Screens: Over 20
General rating: An excellent *Mr Do* variant. Well worth a dabble.

Use of computer	86%
Graphics	84%
Playability	83%
Getting started	89%
Addictive qualities	90%
Value for money	85%
Overall	88%





CRYSTAL KINGDOM DIZZY

Programmer: **Evgeniy Barskiy**
Graphics: **Dmitri Ponomarjov**
Gui & Menu Pictures: **Oleg Origin**
Music: **Sergey Kosov**

Crystal Kingdom Dizzy was released for many platforms, from consoles to the Spectrum, way back in 1992, and it kept other big franchises like *Street Fighter 2* off the top of the charts. Now some 25 years later and released in time for Easter 2017, we have a completely remastered version of the game which has been the talk of the Dizzy-loving community on social media ever since.

The loading screen is the first thing to leave you breathless. It's a reimagining of the original Codemasters cassette cover art, and placing the two images next to each other shows just how close Oleg Origin got to the original. The next thing to impress is the AY music: there are six original scores within the game and the first tune starts playing on the move from loading screen to attract mode. It's so good that you may want to load the game

KINGDOM DIZZY

again and again just to listen to the music.

There are two options, one for the control menu to select Kempston or define cursor keys, the second to switch the AY music off, leaving only sound effects.

Crystal Kingdom Dizzy has been developed over a couple of years, and from the ground up. Its engine runs at 50fps, which gives a super-smooth look and feel to the graphics – based on the Amiga version. As the game flicks between its 136 locations, the love and attention to detail is evident and it encourages exploration and the solving of the many puzzles. The Magical Crystal Treasure has been stolen and scattered all over the game map – and yes, your job is to collect that treasure and make the world good again (while avoiding the pirates).

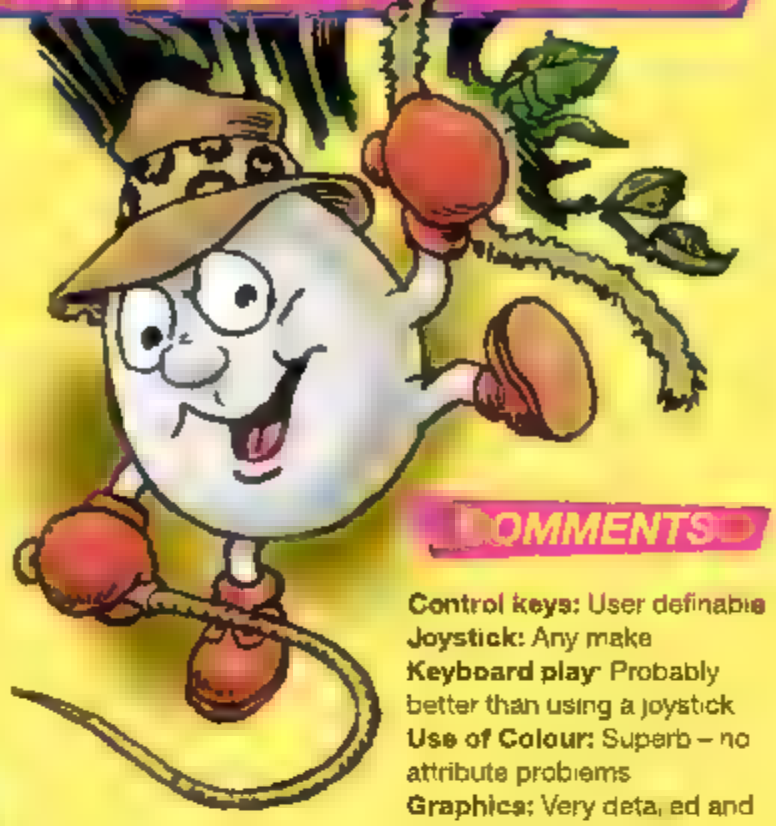
a new title, the programmer has said that he is willing to continue to improve it if necessary, based on player feedback.

Chris Wilkins

CRITICISM

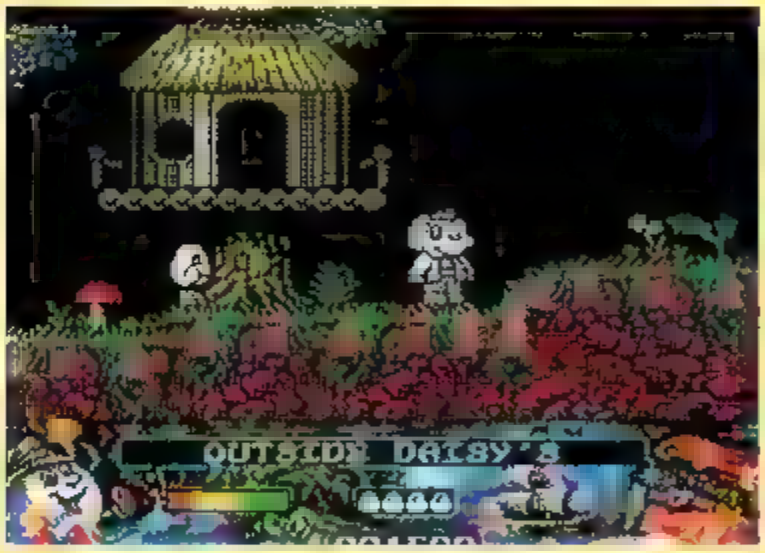
• *Crystal Kingdom Dizzy* oozes quality – the 128K music throughout the game is some of the very best and accompanies a graphical environment which pushes the Spectrum's capability to new levels. A Dizzy game has never looked this good. The basic gameplay is familiar if you have played other Dizzy games – the beautiful world that you explore in CKD though enhances the explore/collect/switch mechanic which is typical of the series. You will want to see every graphical nook and cranny that the game offers – so expect to pick this game up and find it very hard to put down.

Ant Harper



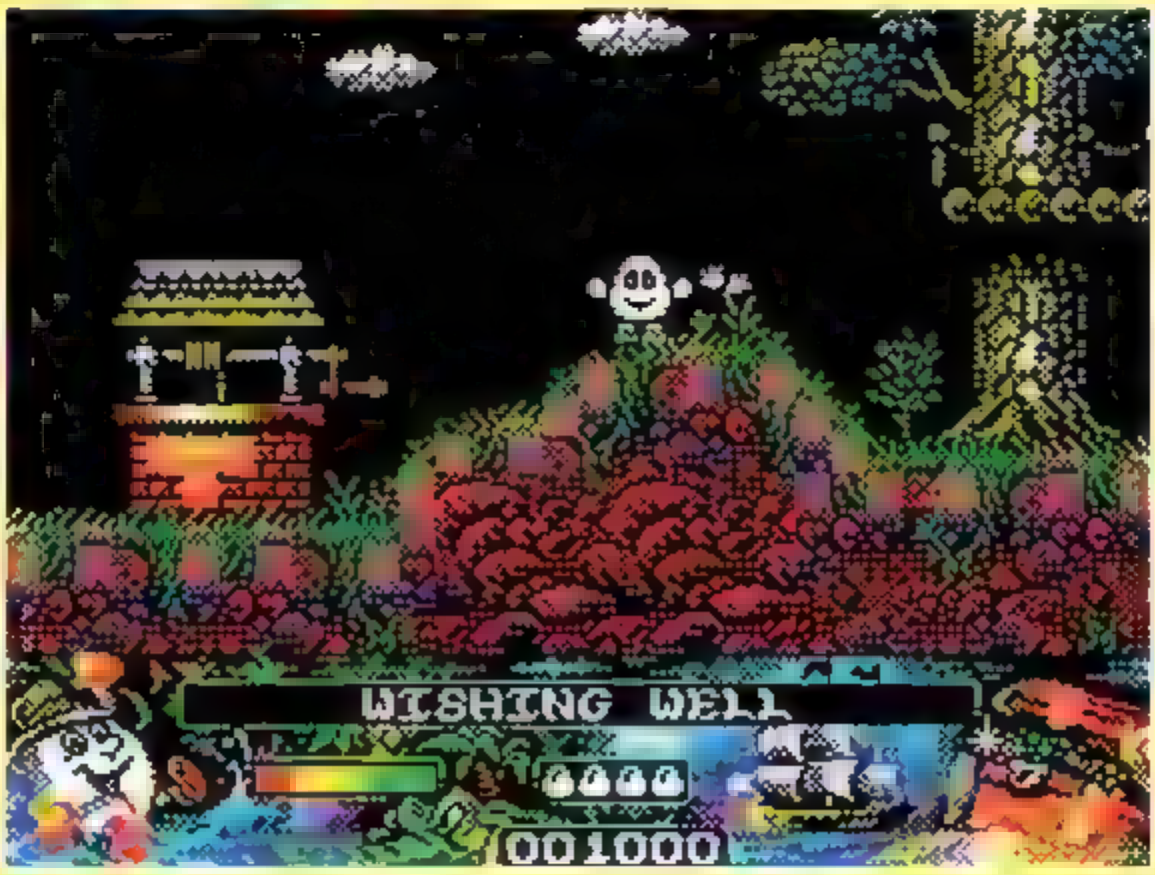
COMMENTS

Control keys: User definable
Joystick: Any make
Keyboard play: Probably better than using a joystick
Use of Colour: Superb – no attribute problems
Graphics: Very detailed and smooth animation.
Sound: 6 AY tracks, excellent
Screens: 136
General Rating: One of the best looking games on the Spectrum. It's Dizzy



CRITICISM

• If you have never played a Dizzy title before, there are easier games in the series to get started on. Some puzzles have you making blind jumps off screens or encountering enemies that zap your health. While this is somewhat par for the course in playing Dizzy adventure titles, there can be moments when you are stuck finding an object to progress or trapped in a space with no means of escaping without suffering. However, as this is



LLOYD MANGRAM'S FORUM

Imagine what fun it was to pen the Letter Of The Month and receive £30 of software. Fortunately for the Fusion Retro budget, which hangs like a sodden weight on my hag-ridden but broad and fortitudinous back, it appears that now you can have nearly all the modern stuff for free! When did this happen? Where did the good old 1980s habit of robbing kids of their 'hard-earned pennies' in return for handing over a bit of BASIC go? Dammit, you go to sleep for a quarter century and everything's changed. What hasn't – it seems – is the letter writing habit, except that it all comes through a wireless connection these days (my old mum had one of those, took an age for the valves to warm up). I remember the editorial savages on *Zzap!64* magazine had one of those rubber phone things to talk to Lucasfilm in California. Always knew it wouldn't come to much. To the letters...

RUMPELSTILTSKIN?

Dear Mr Mangram,
So tell me, what have you been doing all these long years? Sitting gathering dust in a corner of CRASH Towers covered in Oli bugs? (Lucky devil) or have you been amongst us, keenly up to speed on the modern console/gaming PC wars, but realising that the ZX Spectrum was still the best computer the whole time?

Or have you been in cryo-storage and have no idea that those smug BBC micro users were finally all exiled to the moon?

Basically, WHERE HAVE YOU BEEN?
Yours kindly,
Stropmus Hagnoopy and Brenda the goat.
[aka Graham Richards]

You're not the only one to wonder about this, Brenda...

Dear Lloyd,
What have you been doing since issue 98 and have you upgraded your headgear from a paper bag to a cloth sack yet?
Riggz (Nottingham)
Sent from my Windows Phone

You have a phone in your window? How nice. Ours sat on a small table in the hall by the front door. Anyway, to answer these questions I must first repair to an article by Iain Black in his – ahem – Def Guide to Zzap!64 (sorry) after a visit he made to Ludlow in... oh a good while back. He wrote.

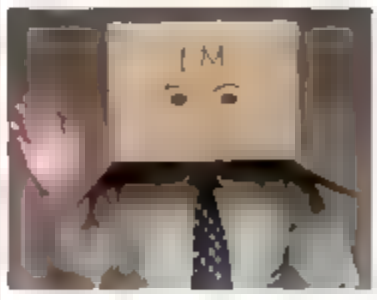
'Just before I finish this article, there's an amazing discovery I made... in connection to Lloyd! He still lives in Ludlow, apparently not wishing to venture further out into the world after Newsfield and Impact closed down. Is he still working in the computer industry? Unfortunately not, he now owns a pharmacy on Upper Galdeford. He is also as reclusive as ever, he never actually works in the pharmacy and after talking to the staff, I learned that even they only see him once a week when he gives them their pay cheques.'

Back then, my modest post-CRASH boutique chemist's looked like the photo Iain took...

My old mum used to listen to her 'wireless' every day, bless...

but I'm thrilled to report that since then the business has flourished, expanded, and crossed over the corner to become the fine emporium of cosmetics, emetics, and complex philtres that keeps Ludlovians healthy and wise though not so good with the use of the apostrophe.

As for my headgear, I'm pleased to say that too has improved no end.
LM



POWER WILLIES

Hi Lloyd,
I'm hoping you can help me out with a problem I have. Back in 1987 I started a game of *Jet Set Willy*, just to pass the time on a rainy Saturday afternoon. I'd just finished watching *Going Live!*

and thought I'd try again to help Mother Willy get some well earned rest.

After an hour I'd successfully collected 30 glasses and thought I might

finally be onto a winner. I thought an injection of sugar might help my cause so I nipped to the local shop for some Opal Fruits and a Marathon bar. I also grabbed a can of Quatro to wash them all down.

On the return to my house, to my horror I discovered there had

been a power cut and my beloved Spectrum had shut off! Gutted wasn't the word, so I quickly re-loaded and thought 'This load is going to be the time I do it!'

I ripped into the game and after two hours I had bagged 55 glasses and still had 6 lives left! Scarred by the horror of discovering my last game lost I made a phone call to a mate's father to borrow a petrol generator to allow my Speccy to maintain power even in the event of another power cut. I fired it up and away we went!

Now, 30 years later, I'm on 77 glasses, only 6 glasses short of a completed game! My question to you is could you possibly pop to my local garage to collect a few gallons of petrol to help me through the night please? Your help (both physically and mentally) would be hugely appreciated!

Yours faithfully (and hoping this nightmare can finally end soon!!!)
Iestyn Davies

Well that took an amazingly long time to get to the point, didn't it. If you listened to the news, Iestyn, you'd know the government is banning petrol-driven engines within 23 years, by which time I hope you'll be closer to getting your hands on those last six glasses before JS Willy powers down forever.
LM

CRASHBACK

Dear Lloyd,
Welcome back old friend! Sometime in the summer of 1989 my trusty Spectrum, hundreds of games and several years of bound CRASH magazines were boxed up. Childhood had ended and it was time to work.

I waited, time passed and somebody invented the World Wide Web, which after a while contained the sum of humanity. There was no need for those boxes of physical history as CRASH could be read and ZX Spectrum games played on wonderful new PCs. eBay arrived, the past was sold and I sat down to sing about gold.

Then came social media and it turned out there were a few of us, growing to hundreds then thousands who still held our first love dear; we talked about the games and we could even talk to some of the legends that made them.

35 years on there are new versions of the ZX Spectrum in production and new games being released weekly, so it's only fitting that CRASH should return and the excitement of waiting for it to drop through my letterbox is the same today as it was back then.

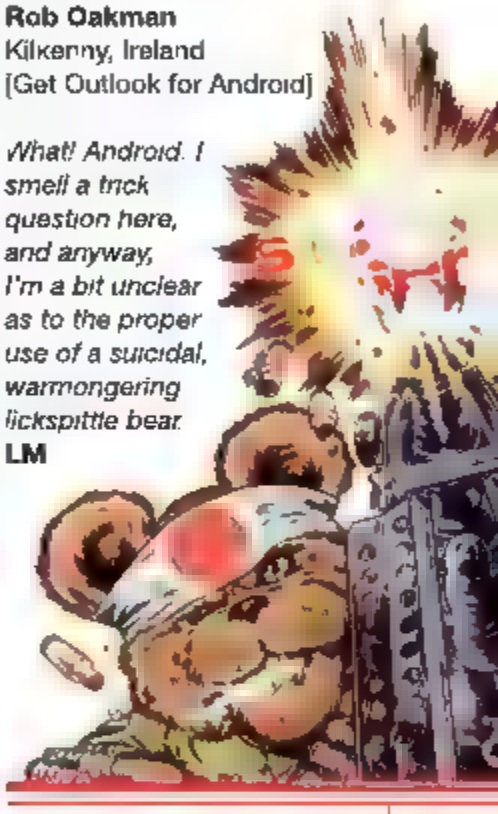
Very best wishes,
Chris Mitchell
(@zx_spectrum, 30)

It's nice to be back, Chris, even if He Who Must Be Obeyed is letting me out of my box for such a short time.

Of the Soshal Meeyda you speak of, I have considered a Twitter account, but sadly tweeting's just not my thing... after all, 140 CHR$ doesn't allow for much use of LMLWD, does it?

Hi Lloyd,
You love Kamikaze Bear really don't you!?
Rob Oakman
Kilkenny, Ireland
[Get Outlook for Android]

What! Android. I smell a trick question here, and anyway, I'm a bit unclear as to the proper use of a suicidal, warmongering lickspittle bear.
LM



CATCH UP

Dear Lloyd,
Hello. Thanks for helping to recreate our much loved CRASH Magazine from our childhood. CRASH has always been a favourite of mine for as far back as I can remember (I'm 37¾ now!).

I always remember seeing the magazine on the shelves of my local newsagents on the way home from school and bugging my mum to buy it for me. Of course at the time this was mainly for the FREE cover tape. Back then we couldn't afford many games. I did get pocket money (£1–£2 a week) which meant I could buy the likes of a budget Mastertronic title, or Codemasters. But having three or four free games on a cover tape really helped to boost the collection. It wasn't until later years that I went

back to read the articles, and they are great! So in-depth and interesting.

Today, I still find it funny how they could write around two pages to review a basic game that consisted of one or two screens. So this is a thank you really from all of us Speccy fans, who still to this day collect these games and magazines. I hope this helps to preserve its legacy and keeps the Sinclair ZX Spectrum alive for years to come.

Happy gaming,
Adam 'interghost' Cleaver

To be honest, I found it funny any of them could string two words together when it came to the reviews. Of course, we professional contributors were different... but then hardly any of us educated ones could play a game like the dedicated CRASH school team. Funny, too, how many of them turned out okay.
LM

Out of skool: Ben Stone and Robin Candy pictured in December 1984 – despite a childhood ruined by too much games playing they turned out okay... sort of.

PLAYING TRUANT

Dear Lloyd.
What time do you call this? ? 25 years and you don't even call to say you're ok? You treat this place like a hotel.
Craig Anderson
www.80sNostalgia.com

I have to tell you that CRASH Towers was nothing like a hotel until the egregious Zzap!64 crew arrived. You wouldn't believe the times I tripped over Gary Liddon sleeping half under a work table when I used to get in at 6 am to get some typing done in the peace and quiet.
LM

IT'S A SELL-OUT!

Dear Lloyd,
I have decided to sell up! After 35 years, the once-torrential deluge of Spectrum games has turned into a brief smattering. I long for the days of *They Sold a Million* compilations and fantastic licensed fodder such as *RoboCop*, but a visit to Boots these days is a crushing disappointment. For whence there was row upon row of multicoloured Ocean and US Gold cassette boxes, sitting proudly next to lurid yellow Boots C15s, there are now just gift sets and washbags – nowhere near as exciting!

Sure, Cronosoft and their ilk are still flying the flag for the long-suffering Speccy fan, and I hold out some hope that the ZX Spectrum Next can breathe new life into the (in my opinion) ailing market, but my head has been turned and I'm thinking of upgrading to one of the new 'games consoles' being advertised in other magazines – maybe a Nintendo or a Sony?

I really love CRASH magazine and I hold out hope that if the Spectrum does eventually bow out, you might consider covering games for the next big format instead?
Bill Tyler

Good Heavens! 'Upgrading' you say, Bill. I've never heard of Nintend O'Somethings, though I confess to owning a Sony Cybershot camera with those megapixel thingummies, and I'm thinking of upgrading my typewriter to a Microsoft Xbox so I can write using Word in future but abandoning the Speccy (lost for words). Courage mon brave – the Next could be your saviour. The next correspondent evidently believes in it, and he's a Yank.
LM

Dear Lloyd,
I'm getting a ZX Spectrum Next soon, and would like to know more about the new Layer 2 graphics mode. Can I access and manipulate this using BASIC and a non-accelerated machine?
Thanks,
Robert Webb
USA

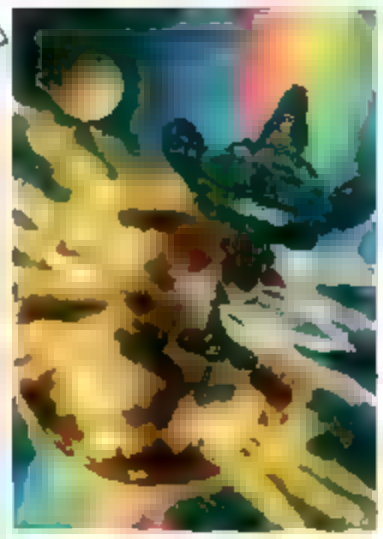
Oh Robert, Robert, Robert, you're talking to the letter answerer, not the Tech Niche expert! I should try asking someone at specnext.com.
LM

O FLATTERER!

Dear Lloyd,
It's unbelievable, but true!

1984 was a great year for the Speccy with CRASH #1, and the coming months are lining up to be an awesome time for the ZX fans as next the Next will soon be arriving at our doors. And who knew CRASH would make a comeback too!! I can't wait for what you guys have in store for all of us!

In the previous issue (#98) big fonts were used to claim that '...now there's ONLY one mag to choose for the



best in Speccy games!" so glad that is still true today with you all getting together to bring us the latest from the known universe's ultimate in Spectrum magazine entertainment! -p

You used to say that you couldn't promise to print everything that would come in because space was precious (you were told) but you would do your best. So even if you don't print this, please know that you guys are once again doing something very FANtastic by bringing back amazing memories of a great magazine and of an even greater machine!

Cheers,
André Lessa

Thank you for the vote of confidence!
LM

TO PORN, OR NOT...

Dear Lloyd,
Now that the decades have passed and technology has advanced beyond any sort of 1980s recognition I would like your view on adult material on our beloved Speccy. Is there a future and was there really a past?

If the scaremongering was to be believed, we would be rattled by *Jack the Ripper* frightened by *Friday The 13th* and stimulated [eventually] by *Sam Fox Strip Poker*. However, I wonder if the 256x192 display was ever capable of shock and scare

In 1987 let alone 2017! Would the Spectrum's best attempt to scare today's audience be laughed off in the same way the special effects of the once-banned film, *The Exorcist* are now? Perhaps its ability to do so now relies solely on the genre of text-adventures and our delicate sensibilities rather than the grainy graphic depiction of a digitised nipple or 24x8 pixel chainsaw? Let's face it, its ability to deliver a truly immersive experience where your senses were heightened were always limited. However we have seen some wonderful effects and demos since the commercial end of the Spectrum so maybe there's a jump-scare waiting for us yet.

Have our attitudes to this genre gone soft over time or do they remain firm? Would rebooting an 18+ formula to an ever-ageing audience result in the inevitable flop?

@tobobobo

I'd certainly expect so! I recall slavering teenaged boys slobbering over the newly arrived Sam Fox game and the howls of angst and outrage at the actuality. What did they expect for £8.95?

LM

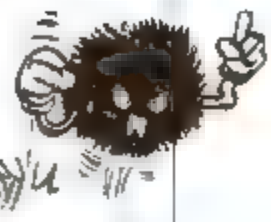
S/W GONE?

Dear Lloyd,

It's great to see you back after such a long time, but now the welcome is out of the way, there's something we need to talk about.

Where has all the Spectrum software gone? Having visited Toys-R-Us and Game recently, there are no Speccy games to be found! And as for Menzies, well they've only gone and shut up shop – probably because all the Spectrum owners stopped shopping there when they stopped selling games. How can retailers expect the Speccy scene to survive if they don't stock the software!? It's a disgrace! You can tell they're trying to force us into upgrading to expensive new consoles like the Xbox. Hopefully the upcoming release of the Next will remedy the situation, and we'll see the glorious return of the crazy-cartooned, groovy-covered games instead of the bland, 'man-with-a-gun' covers of most games these days! But in the meantime, can you tell me where to find new software? Thanks.

Ewen (deadpan666) Kirk
Near Edinburgh



PS. Where have the Olibugs been living for the last 25 years?

PPS. Is Enor the mouse still nibbling around, or has he gone to the Great Cheese Shop In The Sky?

There's a lot of new software available online for the Speccy and info on upcoming Next stuff may be found at www.specnext.com. As for Enor – strong but daft isn't Hunt Emerson drawing him still and the other Beano *Nibblers?*

LM

Stuart Williams's Adventure Trail

Welcome to a new Adventure Trail column for the new CRASH Annual! At this time of year it's traditional to look back, so I want to reflect on the last year or so of the original column. Following the CRASH Christmas Special for 1987, published January 1988, my illustrious Adventure Trail predecessor, legendary games programmer Derek Brewster of *Codename MAT* fame, was, sadly, off and running. He was departing the pages of CRASH to join forces with fellow Tynesoft coder Brian Jobling and Martin O'Donnell to set up software house Zeppelin Games, and '...wouldn't have the time to breathe, let alone LOOK AROUND', it was said at the time.

His work was, readers were told, to be followed up in future by adventure fans in the CRASH reviewing team. That particular Adventure Trail had the feeling of the end of an era about it, despite printing Brewster's last ever Trail in red and green 3D. Apart from covering CRL's new *Jack the Ripper* game, the feature was mostly letters, tips and Q&A's from readers in Signpost and Signstumps, and that was that.

Popular releases

The mood had been a touch bleak in the 1986-87 Chrimbo CRASH. Our man Brewster had bemoaned the dearth of good new adventure games, saying that '1986 will not be remembered as the year of the adventure, even if many people, bored with the transient thrills of arcade, did suddenly discover the more lasting satisfactions to be found in adventuring.' Too true, Derek, too true. As some may recall, that year many individuals had set up software houses for publishing a large number of *Quilled* adventures that were, Brewster opined, '...neither innovative nor remarkable.' That of course was then, this is now, decades later, and in the online era any new adventure game for the dear old Speccy would be welcomed with open arms.

Still, even in the CRASH Christmas Special Adventure Trail of 1986-87, all was not entirely doom and gloom (unless you're talking about *Mount Doom*, that is), since there were a few real gems which had stood up to be counted in the year before, certainly including some faves of mine own. The biggest game had of course been *The Lord of the Rings* from Melbourne House, which was the next step up from legendary Tolkienfest *The Hobbit* (of which more later). Sadly Brewster, and many others, felt that the new ring piece just wasn't in the same league as Bilbo's earlier wanderings, rather the opposite of today's blockbuster films. He felt that, in a sense, the failure of *The Lord of the Rings* to make it game-wise was symptomatic of a general malaise in the adventure world, as if adventuring as a whole had lost its way. He wasn't far wrong, as it turned out. Traditional adventure games and the 8-bit market itself were both on the way out by then, and the writing was on the wall, though perhaps not in ornate Elvish script.

Nevertheless, dear reader, British software heroes LEVEL 9 were still there punching away, with popular releases like *The Worm in Paradise* (last part of the *Silicon Dream* trilogy) and *The Price of Magik*. The other big name of 1986 was Fergus McNeill of Delta 4, who had himself begun making games on *The Quill* adventure system. Brewster saw Fergus as 'a budding comic talent' who had secured a loyal following among adventurers. Delta 4's rise to fame had much to do with enormous interest in *The Boggit*, that ever-popular lampoon of the aforementioned Melbourne House product.

What about Christmas present, and beyond? Does the Spectrum have a future in adventure gaming? Our Chrimbo crystal ball says yes, fingers crossed. I mentioned *The Quill* earlier. These days, dedicated Speccy adventurers would beat a path to the door of the developer of any decent new *Quilled* or *PAW*'d game for their favourite little rubber fob – or perhaps more likely, for their new best friend, the much-anticipated ZX Spectrum Next, which as

"There and Back again"

I write, is expected in late 2017 (board only) and cased in January 2018. Possibly many expectant 'Nexters' will have a well-thumbed copy of this annual by then as well, having found one tucked away beneath their Christmas tree, and will draw inspiration from it.

Tim Gilberts, founder of Gilsoft, who published *The Quill* and the *Professional Adventure Writer*, tells me he is currently working on a new version of the *PAW* for the Next, which is going to excite many who want to create new adventures on the new machine, and maybe even for older Speccies.

There should hopefully be support for ESXDOS to load, save and load Layer 2 graphics in game and as a backdrop/frame, support split screen and even Timex mode for 64 column text as an option. Plus longer descriptions and messages, and more. Tim says he wants to do a physical release if he can, since he sees a manual as being vital.

New code

A Spectrum Next version of *PAW* could also potentially be used to write for the 48K machine, but this would not have access to most of the extra features or RAM of the Next. It might still work with a DivMMC to allow loading overlays/pictures from SD card using ESXDOS. Gilsoft of course is long gone, so Tim is pretty much working on his own, and recovering data and adding new coding takes time, so this all remains to be seen.

Meanwhile, here's a few reviews of more recent Spectrum adventures, including one which is both 'then and now' and 'there and back again'.

THE HOBBIT 128K

Original Producer: **Melbourne House**
Original Price: **£14.95** Now **Free .tap download on WoS**
Authors: **Philip Mitchell & Veronika Megler**

In a hole in the ground, there lived a Hobbit, and he played all night on his 48K Spectrum. Well, that was back in 1982, when the original version of Tolkienistas' most preciousss adventure game was launched by Melbourne House. Even the Spectrum elves liked it, and they were notoriously hard to please. The dwarves were not quite so keen, but that's dwarves for you, they much prefer eating, and singing about gold.

So it was that *The Hobbit* game came, conquered the competition, became the first ever Spectrum game to sell a million (despite never being released in the USA) and passed into legend. But it was always limited by that meagre 48K. Until, in 2015, adventure fans on the World of Spectrum forums had the bright idea of rebuilding the game, with many more graphics, for machines (and emulators) with 128K ram. This exciting but somewhat controversial community project had been ongoing for some time, under the aegis of Speccy dev Einar Saukas, when another dev and fellow member of WoS, known as Kayamon, '...got tired of the quibbling over tiny details in the development thread' and decided to go ahead and finish the project himself, causing fallout on the forum. Saukas stated he was going to finish the game all along, but Kayamon didn't want to wait any longer, and just did it. Whatever the right of the matter, many users were just

glad to have a 'new' adventure game to play with, and got on with doing so. Which means one of the oldest and finest Spectrum adventures can also be counted as one of the newest.

The game itself plays like the 48K original, but fifty-five 'new' faster and more detailed, bit-mapped screens, ported from DOS, C64 and BBC Micro versions of the game, replace the original thirty or so slow, game-drawn vector graphics, adding even more atmosphere, albeit of varying quality.

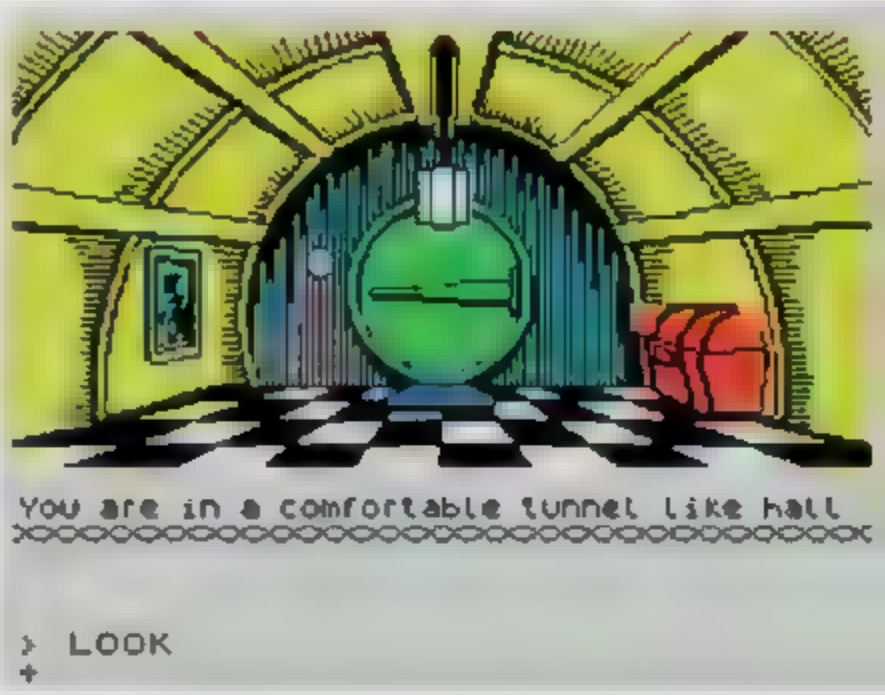
Mick Sparrow also created a much-improved loading screen, and there's a new title screen crediting the original game authors, Philip Mitchell and Veronika Megler, as well as WoS.

The 128K *Hobbit* remains a lot of fun, if no easier than the original, complex and often puzzling game. It's full of those classic staples such as a scoring system, finding (or losing) companions, mapping, collecting items, killing goblins, trolls and even (heresy!) poor old Gollum (hint), killing the dragon Smaug and nicking his treasure, not to mention grabbing a certain ring and sticking it in your pocketses. In addition to snuffing it in various unexpected ways, naturally. There are a myriad hints, tips and walkthroughs online if you're not bothered about spoilers, but waiting is sometimes as useful as doing something, and don't lose that ring.

The Hobbit improved on previous adventure games in terms of artificial intelligence. Some of the characters 'move' about the game independently of the player, so you are never quite sure where (or if) help is going to come from if you need it. Gandalf, for example, still has a tendency to wander off at crucial moments in the 'new' version.

It certainly helps to buy yourself a copy of Tolkien's book (not the films), as was supplied with the original game, which adds much to your involvement in the story.

It's a great game and now looks even prettier. What better way to rekindle your fellowship with Bilbo, Gandalf and co., not to mention good old Thorin, who still loves nothing better than to sit down and sing about gold while waiting for you to get your act together?

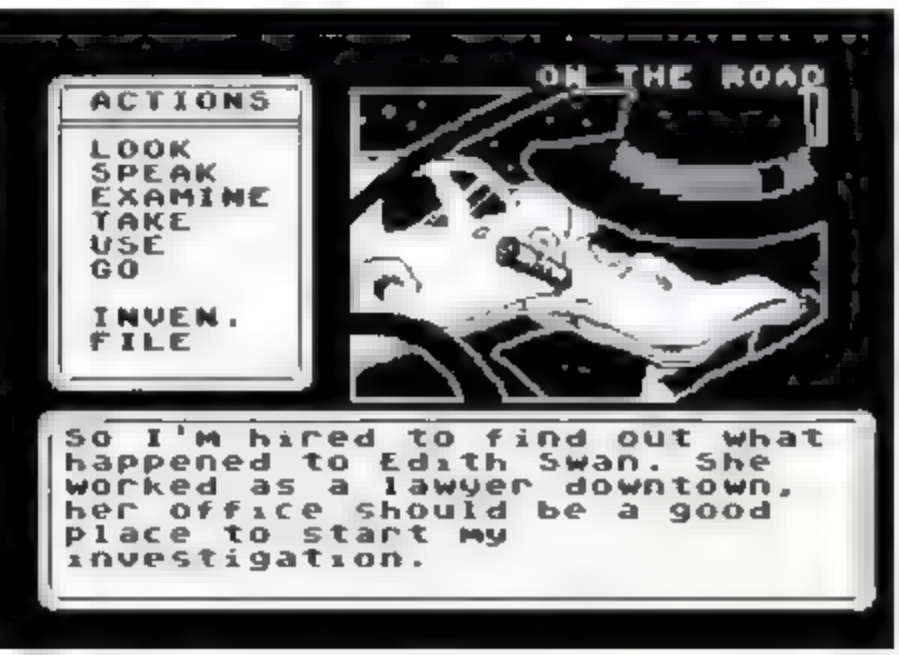


COMMENTS

Difficulty: There are some tricky puzzles you probably won't get through first time
Graphics: More graphics = more atmosphere
Presentation: Colours can be a bit lively. Much faster display than the original
Input facility: 'Inglish' natural language recognition. Quite advanced for its time
Response: Quite fast
General rating: Highly recommended great fun if you're a Tolkien fan in particular

Atmosphere:
Vocabulary:
Logic:
Overall:

SAM MALLARD – THE CASE OF THE MISSING SWAN



Producer: **Monument Microgames**
Price: **£8.50 inc P&P** or **free .tap download on WoS**
Author: **Mike Ohrn, aka Ersh**

Down these mean streets, a duck must waddle. Sam Mallard – subtitled *The Case of the Missing Swan* – is something more than a bit different for the Speccy. A noir-esque, menu-driven graphical adventure in black and white, where you play a fedora-wearing duck. It's also pretty much brand spanking new by Spectrum standards, having been released online on World of Spectrum, where you can download it for free in August 2016. However you can now also buy it on cassette – with added goodies.

Fans of old-school detective/gangster movies (like me) will find themselves immediately at home with this short but sweet outing into Humphrey Bogart-style adventuring, albeit as a, dare I say it, duck-tective.

You are Sam Mallard, the

eponymous anti-hero, and as usual you are still in your office late at night when, the clock having turned midnight, you get a knock on the door and a Mr. Swan, owner of the Swanline Shipping Co., tells you all about how his wife, Edith, has disappeared, and the police aren't being helpful. Can you track her down? As an incentive, he offers a grand up front if you can find his wife by morning, no questions asked. You might well be suspicious about this, but with a shortage of clients queuing up to hand over a wad of smackeroos, you're not going to ask questions, are you?

One thing particularly love about this game is the look. It's just like an old school black and white Apple Mac adventure from the 1980s, albeit lower res. Screen layout offers an action menu to the upper left, graphics to the right of that and a text window at the bottom of the screen. Controls are simple: you can use a Kempston joystick, or the Q and A keys (up and down) plus spacebar (select). You don't even have to type anything in. This means the 'vocabulary' is very limited.

The 48K Spectrum cassette version comes as a super little package, with a Sam Mallard badge and card, instructions, and even a mini-CDR so you can run the game on a Windows PC via emulator or copy it onto an SD card. However, the game also ran perfectly via FUSE on my Mac Pro by double clicking on the sammallard.tap file in the Resources folder.

This atmospheric and easy-to-play outing into the world of duck-noir is not just for the birds. It would be a great intro to adventuring for anyone who hasn't played such a game before or who hasn't hours to spare. If you're a collector, the money for the cassette package is well spent. Highly recommended.

COMMENTS

Difficulty: Easy to operate, short but a few head-scratchers along the way
Graphics: Atmospheric and fun. Lack of colour is no oss, quite the opposite
Presentation: Simply but well laid out. Great package if you buy the cassette
Input facility: Easy-peasy
Response: Fast
General rating: Duck tastic! If you love old noir movies, you'll love this

Atmosphere: [illegible]
Vocabulary: [illegible]
Logic: [illegible]
Overall: [illegible]

BOUNTY – THE SEARCH FOR FROOGE

Producer: **Paul Jenkinson**
Price: **Freeware**
Author: **Paul Jenkinson**

Space, the final frontier. Sometimes a place for exploration, sometimes the scene of grim, stark terror, where no-one can hear you swearing at your cassette player. *Bounty – The Search for Frooge* is part one of the Space Bounty series, and was written and published by Paul Jenkinson in 2012. It's an old-school spacebound text adventure, in which you are a kind of poor man's Boba Fett, on the trail of a fleeing fugitive. But there's more to it than that.

All seems well to begin with, as your sleek, pulse-engine powered spaceship lands on the desert planet of KayCee 3, and you detect a breathable atmosphere. As you step out of the ship, the twin alien suns beat down mercilessly, and you can see little but lifeless desert. Or is it? First signs of life appear in the form of a small animal making wooop woop noises. Mountains lie to the north, but everywhere else is naught but sand and dust. Your mission is to head for the hills, where you will discover a crashed spaceship. Dare you enter it? Not so fast, hero – you need to go backways and do a little exploring first.

For a modest adventure, there's plenty to see and do. If you wander about the landscape, structures abound, some complex, as well as a cave. There's an important and well-defended alien building with a puzzling keypad, a mysterious storage bunker, plus useful tools and other less expected but equally useful things to acquire along the way. Remember you can't carry everything at once. You'll come under pressure at times, which makes things interesting. Oh, and a propensity for random violence might prove useful.

The odd typo and truncated command word doesn't detract too much from what is a fun and atmospheric text adventure, with good descriptions but no graphics. This is a relatively short game, with not much to do to ensure your getaway right at the end, but it is enjoyable getting there.

COMMENTS

Difficulty: Tricky. Some objects or clues need combining with others
Graphics: No graphics, it is what it is, a classical text adventure
Presentation: Standard stuff. Has a loading screen but flashes by in emulators
Input facility: Standard verb/noun text input
Response: Fast
General rating: Fun under alien suns. A longer version with more polish please.

Atmosphere: 92%
Vocabulary: 75%
Logic: 68%
Overall: 83%

The CRASH WATCH
Whether it's timing a game level or just to know when it's dinner time, no one should be without a CRASH Watch! And it's a smart one... well, it *looks* sharp!

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Rain or shine, the CRASH Cap is back, in sublime 'CRASH blue' with woven jacquard logo. Fits all sizes (unless your head's really small or incredibly big).

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Nick Roberts's PLAYING TIPS

NAME THAT GAME CHEAT #1

Which classic Spectrum game does this cheat come from? Answers upside down at the end! To help you out we've given you a single sprite from the game as a memory jolt!

Want to get to the 'Conservatory Roof'? Then you need to start a new game, don't move, but instead press **3**, then **9** and then **6**. Keep these keys pressed down and you will be transported to ***A Bit Of Tree***. Continue to keep the keys pressed down until you are just above the top edge, then jump up. You will now arrive at ***Under The Roof*** where you can move left to find the ***Conservatory Roof***

BACK TO WORK

A day in the life of a 40-something Spectrum child star!

Life was much more simple back in his *Skool Daze* for our 'hero' Eric – joyrides on Albert the caretaker's bike, fun with friends, kissing his girlfriend at the school gate – but what is Eric up to in 2018? It might go something like this...

● Eric and Hayley are no longer together, she eventually got fed up with stealing kisses over the gate and went off with the school swot. Einstein. Hayley and Einstein now have two boys and live in a large seven-bedroomed house. Einstein is on his third start-up tech company, and is a millionaire. This was not before Eric and Hayley had their son though, which Eric christened Ernie. (*Hmmm ..*, I wonder which was his favourite comedy double act!)

● The old school building was divided up into offices back in the early 2000s, giving all the new 'webmasters' somewhere to knock out rubbish-looking websites for local building firms. Eric now has a job here, but as he didn't pay much attention at school he's not working for the web companies – he is in charge of opening up each morning, and ensuring there are enough toilet rolls in the bogs.

● Eric hates his life and spent a year on the sick

MYSTERY WORLD DIZZY

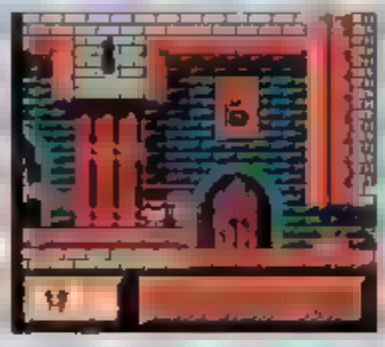
When Philip and Andrew Oliver (aka The Oliver Twins) ransacked their childhood attic for last year's *Go! Dizzy Go!: The Story of The Oliver Twins* (Fusion Retro Books), little did they think they would stumble upon a game that didn't get a release.

Mystery World Dizzy was written for the NES as part of a proposed multi-cartridge pack to be published by American company Camerica, only they went bust before it could come out.

It's a bit of a remix of *Fantasy World Dizzy* really, but has lots of 'eggcellent' Dizzy puzzles to 'crack', 'yolk' won't have seen before (sorry!). Here are a few pointers to get you started ...

• Trolls still love apples. If you drop the apple near him he will turn a blind eye when you throw the jug of water over the fire to escape the area!

• *Dizzy can swim in shallow water if you want to attempt to collect the 100 coins, but he will drown if you try to dive into the deeper river!*



• A good pull on a lever is always a good way of opening castle doors – there's one in the Banquet Hall. Just be careful of the rat that scuttles across the bridge.

• *The thing about rhinos is they like a good meaty bone. Use the one found in the Tall Tower to get past the pesky rhino Armourog after the drawbridge.*

• Dizzy spins around just as much as he did back in the original "cartoon adventure," so be careful when leaping about the place – he can easily spin on into a spider or passing rat, losing a precious life.

• *Meet Denzil in the castle and have a chat – he has a whip that comes in really handy for tying crocodiles' snouts closed so you can cross the river.*

• Jumping onto the crocodile can finish off even the most seasoned Dizzy player as it's a pixel-perfect leap of faith.

that we loved so much on the Spectrum – wait until the croc is almost to the left and then jump. The game will go into a story, giving you time to get that whip out!

• *Don't attempt to take on the bigger baddies in the game without the correct item in your inventory – the dragon's fireballs can't be*

[TIPS FLASH] You can play Mystery World Dizzy for yourself for free – and it's playing...

with post traumatic stress after stumbling across his old headmaster Mr Wacker, and the headmistress of the girl's school Miss Take, in a 'special' online video chat room. You don't want to know where that cane was going! But sitting around all day watching *Bargain Hunt* or Netflix reruns doesn't bring in the dosh, and Ernie's maintenance money has to be paid, so Eric had to get himself 'Back To Work'.

● Half-way between his work and home, the council has bulldozed the rugby field and inserted tower blocks to house 498 new student flats for the University in town. Ever the chancer, Eric's old Geography teacher Mr Witt, jumped on an opportunity to reopen the 'Pint & Pixel' pub for the students, and Eric can't resist popping in for a pint of Old 8-bit (or ten) on his way home from work. He's the one in the corner being laughed at by tattooed 19-year-olds. Wearing a hi-vis jacket on the door is Angelface, the school bully is now a bouncer.

● Finally making it home from work, Eric is happy that the girls' school was closed due to education cuts back in the mid-1990s as it's now his house. You see, Eric bought one of the first National Lottery tickets in 1994 and managed to win £100,000. Just enough to buy the building at auction. He turned Miss Take's office into a bathroom and now has a giant plasma TV he bought on HP hung where the blackboard used to be. He didn't bother updating the cookery kitchen – if it ain't broke, why fix it?

PLAYING TIPS

defeated, the rhino will kill you and that poisonous tree frog is an absolute nightmare, leaping about the place! You know Dizzy games: pick up the correct object and drop it near your foe to solve the puzzle, then you can continue in safety.

• See the tiny Dizzys around the place? Grab them! These are extra lives, and you're definitely going to need them! There's one near the Wishing Well, one in a barrel in the Warehouse and one up in the Bedroom Chambers of the castle.

• *If you're good enough to reach Zaks himself, the trick to defeating him and completing the game is to bounce those lightning bolts back at him – give him a taste of his own medicine!*

...it's playing in a web browser at... Yolkfolk.com

NAME THAT GAME CHEAT #2

Which classic Spectrum game does this cheat come from? Answers upside down at the end! Maybe you can guess from this small snapshot of the game?

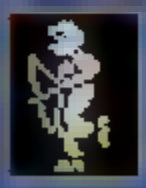
On your first go, do the following: Down left, pick up green key, left, left, left, left, up, up, up, right, right, fall to Golden Key room and pick up Golden Key. Down right, down right, right, right, beware of the devil. Down, down, right. Through bookcase, up, through bookcase, pick up letter G of the key. Through bookcase, down, through bookcase down through bookcase left, up, up, left, left, left, down, left up, up, right, down, left, down, left, left, down left. Pick up AC of key. Right up, right, right, up, up, up. Right, down, left, left, down, down. Pick up handle of key. Up, up, right, right, up right and you've finished the game.

NAME THAT GAME CHEAT #3

Which classic Spectrum game does this cheat come from? Answers upside down at the end, and the sprite might help!

Light a Fire under the Pot and put the Wig, Feather, Silver Line and Brew into it. Drop the Full Bottle next to the Wizard in his castle.

KNOW YOUR POKES!



```
10 CLEAR 65535
20 PRINT "FROM THE START"
30 RESTORE
40 FOR n=23296 TO 23329
50 DATA 221,33,0,0,17,17
60 DATA 0,175,55,205,86,5
90 RANDOMIZE USR 23296
100 POKE 65093,243: POKE 65100,190
140 DATA 225,18,43,19,123,254
150 DATA 154,32,241,62,52,50
160 DATA 81,227,62,21,50,82
170 DATA 227,62,30,50,83,227
180 DATA 195,145,91
190 RANDOMIZE USR 65093
```

Lumo Trophies

One game that has recaptured the Spectrum magic more than any other in recent years is *Lumo* by Gareth Noyce. It takes the classic 3D isometric approach of games like

Knight Lore and Jon Ritman's *Batman* and brings the graphics, sound and effects bang up to date for a modern gamer, while maintaining the devilish puzzles and game design that made the original hits of the genre such a revelation back in the day.

Lumo is now available for Windows, Mac, Linux, PlayStation 4, PlayStation Vita and Xbox One, so there is simply no excuse for not downloading the game and reliving those great days. There are lots of wonderful Trophies to earn, many that will ignite memories for Spectrum lovers. Here are our favourites and how to earn them.

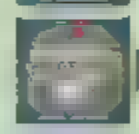
• Zax On, Zax Off [Silver]
There are 110 Zzap!64 logos to collect!

• Bounder [Silver]
Bounce yourself all the way through to the end with more than 110 seconds left.

• Bub 'N Bob [Bronze]
Get the bubble to fly from one side to the other without dying.

• Who ya gonna call? [Bronze]
Without losing a life, kill all the Ghosts.

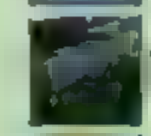
• Multiface II: Judgment Day [Silver]
Pick up the Multiface



• Old Skool Daze! [Gold]
Play Old School Mode and complete the game.

• Cascade Cassette 50 [Gold]
Pick up 50 cassettes.

• Zapped 64 [Bronze]
Pick up 64 Zzap logos!

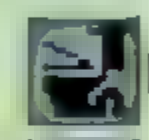


• Paper Person [Bronze]
Make sure you deliver at least one newspaper.

• Duck Hunt [Gold]
While holding a duck, collect all 32 ducks without dying.

• Mean Machines [Bronze]
You get this magazine tribute trophy if you fail to get any bonus letters in the Warp Zone.

• The Games Machine [Silver]
Get all the Warp Zone letters, and this far superior magazine tribute trophy is yours!



• Drop The Kids Off [Bronze]
Flush the toilet – guess where this icon is from?!

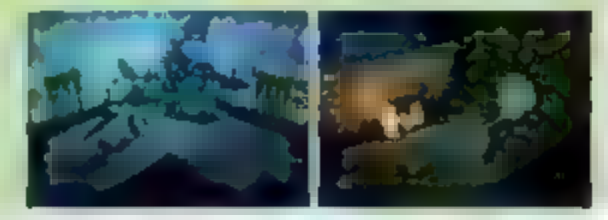
• 'Will you start the fans, please!' [Bronze]
Enter the Orb Maze and start the fan – get the gameshow?!

• Eddie the Eagle [Bronze]
On the ski run, hit all the gates and pick up all the coins.

• You Can't Beat A Bit Of Bully [Bronze]
When you get the Boing Gun – hit the bullseye!

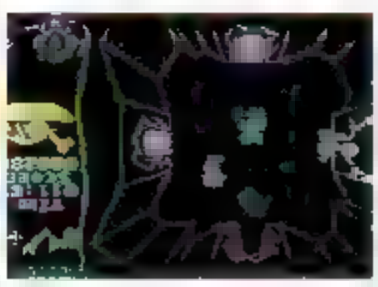
• Manic Mining [Bronze]
In the Mine, get all the coins without dying.

• Ultimate Played The Game [Platinum] Get every trophy and this Ultimate tribute trophy is yours.



ANSWERS

Name That Game Cheat #1
It was *Jet Set Willy* of course!



Name That Game Cheat #2
It was *Atic Atac*!

Name That Game Cheat #3
It was *Dizzy*? Eggcellent

Know your POKES
Well, obviously this was the 'n' finite Energy for every character POKE. Trust me from *Everyone's a Wally*. Originally printed in Crash issue 17 June '985'

KNIGHT LORE

the MAP

CRASH Map Back

Revisit one of those glorious maps, a combination of reader research and the CRASH art department

YOUR QUEST

TRAVEL THE VAST COMPLEX OF ROOMS IN THE RUINED CASTLE

FIND THE CHOSEN CHARMS TO GIVE TO MELKHIOR TO BREW A CURE FOR YOUR ANCIENT PREDICAMENT WHICH TURNS YOU INTO A WEREWULF IN THE DEAD OF NIGHT...

AVOID THE HORRORS

GHOSTS

POLTERGEIST

VOLCANIC BUBBLES

FIREBALLS

FIND THE EXTRA LIVES

KNIGHT

COLLECT THE
CHARMED OBJECTS
CHALICE
POISON
BOTTLE
RUBY
CRYSTAL BALL
CUP
BOOT
MAP DRAWN BY GORDON DRUCE AND OLIVER FREY- BASED ON A MAP BY CALUM AND GRAHAM THOMSON
START
START

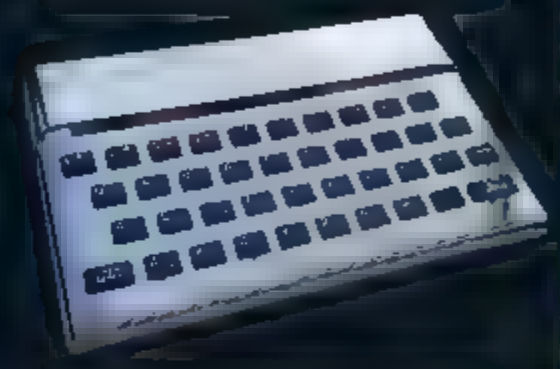
Tech Niche

TECH NICHE

CHRIS WILKINS

CHROME KEYBOARD

The guys at **ZX Renew** are selling a vast array of new keyboard combinations for your worn out Spectrum (both case and keys) – the one pictured here is the fetching, shiny, fingerprint-grabbing **Chrome** edition with standard key colouring. You could go for an all-green combo, or blue, yellow or a combination of all colours available – there is also the



option to go transparent if showing off the Spectrum board to family and friends takes your fancy.

Fitting the Spectrum board into the new case is straightforward – though pushing the keyboard connectors into the slots can be fiddly, and needs care. In use, the feel of the keyboard is remarkably close to that of the original computer – it's hard to tell the difference truth be told.

The people at **zxrenew.co.uk** are taking pre-orders for the case now for the soon-to-be-released **ZX Spectrum Next** boards.

ZX-AY CARD

I was an envious teenager when the 128K Spectrum was released back in the day. My humble 48K Spectrum could only blurt out tunes via its beeper chip and – though the likes of Tim Follin showed what could be done in spite of its limitations – it was the sound the new 3-channel AY chip produced that I longed to hear. With David Whittaker, Tim Follin, Jonathan Dunn and Rob Hubbard composing soundtracks for the latest games, I just wish that this ZX-AY card from **Byte Delight** had been available back then, so I could have played the tunes on my 48K machine.

Plugging the card into the expansion port of your Spectrum (all models and some clones supported), the on-board AY chip is made available to compatible software – i.e. demos that have 128K tunes, 128K tune compilations and in some cases 128K games that will run on the 48K machine with their AY tunes blaring out of your speaker system in stereo. Here's looking at you *Out Run*!

For a great sonic update to your Spectrum, go to **ByteDelight.com** to pick yours up for £24.99.

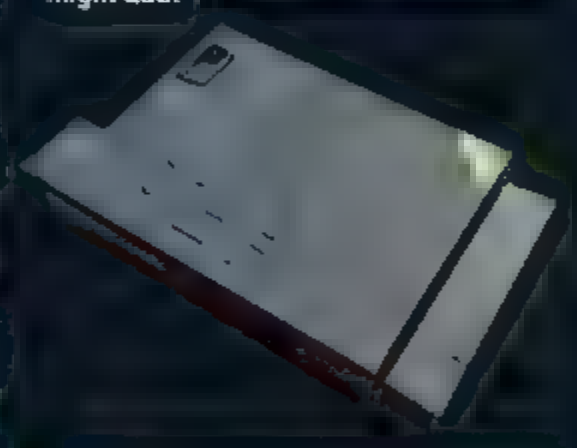
ZX-HD

With the advent of higher definition TVs, plugging a ZX Spectrum into the modern TV via a UHF aerial lead (if you can tune the computer in) gives a picture that's cruel to the eye. The composite mods that can be given to the standard Spectrum go a long way to give a consistent image, but it still falls short of the HD standard. **Byte Delight's** ZX-HD solves this problem by giving a sharp, stable image (lossless, in fact) via the HDMI port on a Pi-Zero card. This sits as a daughter board on the main ZX-HD board and

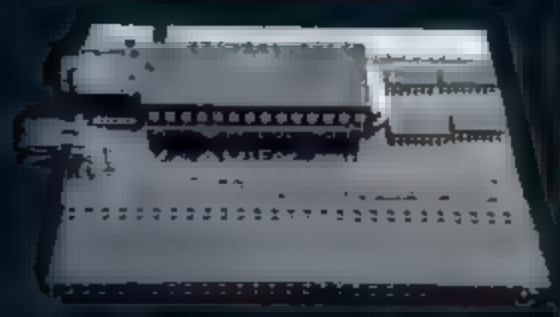
is used for rendering the Spectrum's picture. The ZX-HD comes in kit form and, once assembled and connected to the expansion port, boots software on an SD card when the Spectrum is switched on – the ZX-HD detects which model of Spectrum it's connected to and displays the screen in the correct resolution/aspect ratio accordingly. This device comes highly recommended for HDMI displays, and as a bonus it provides your Spectrum with ULAplus 64-colour support allowing enhanced versions of games to be played in hi-def.

EXPANSION CARDS

We can all remember the melodic beeps and burps of a game loading on the Spectrum and the hours it took for a game to get there (well it felt like hours!). With these two expansion cards from **Byte Delight**, programs can be loaded speedily from one or more SD cards. It's a simple case of pressing the menu button on the device, traversing the list of files read from the SD card displayed on the screen, selecting the file required using the cursor keys, and then pressing the Enter key to load it – in an instant I might add!



The larger device above, the DivMMC, supports two SD cards and a joystick port and costs £59.99 with a nice protective case. The DivMMC Enjoy *Mini* below is, as the name suggests, a cut down version of its bigger brother – just the one SD card and no joystick port, and comes in at the budget price of £34.99. Both devices perform a main core function – loading up ZX Spectrum files from a populated SD card. In this advanced technological age, it is a device that any Spectrum hobbyist shouldn't be without.



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Simon Butler's SCREEN$

The Spectrum/C64 wars are over A final volley sounds over the Commodore's coffin with the emergence of the Sinclair ZX Spectrum Next, Victory however fleeting wi arrive via Amiga-esque graphics and sound capabilities that are dividing camps even as I write.

In these exciting times, it is equally thrilling to see new, young and exceptionally talented masters of the ZX Spectrum, wrestling with attribute clash and a imited palette to produce works that I – a supposed veteran of such things – would never have thought poss ble

After almost three decades away from the days of scream ng tape loading that would test the patience of a saint and a machine that even on a good day sounded as if someone had filled the casing with bees and crickets, I have returned to cast a jaundiced eye across artwork from a new generat on of Spectrum aficionados I must stress however that the Spectrum, always with a Capital S. actually does hold a very special place in my memories of game development formative years. It was an irksome little rascal; crashing at the drop of a non-existent hat, forcing constant saving to cassette that ate up hours of any given 'work ng' day

The l mitat ons it threw gleefully in your face caused you to th nk on your feet as the other two home machines cast colours around with wild abandon. For all its faults it was quintessentially British and, if for no other reason, perhaps that s why I hold it so dear when look ng back at those halcyon days with ever-failing vision.Yet here in this selection it is interesting to find that the majority of those creating wonderfu images on this most awkward of beasts are from far beyond this green and pleasant and, the birthp ace of the ZX Spectrum.

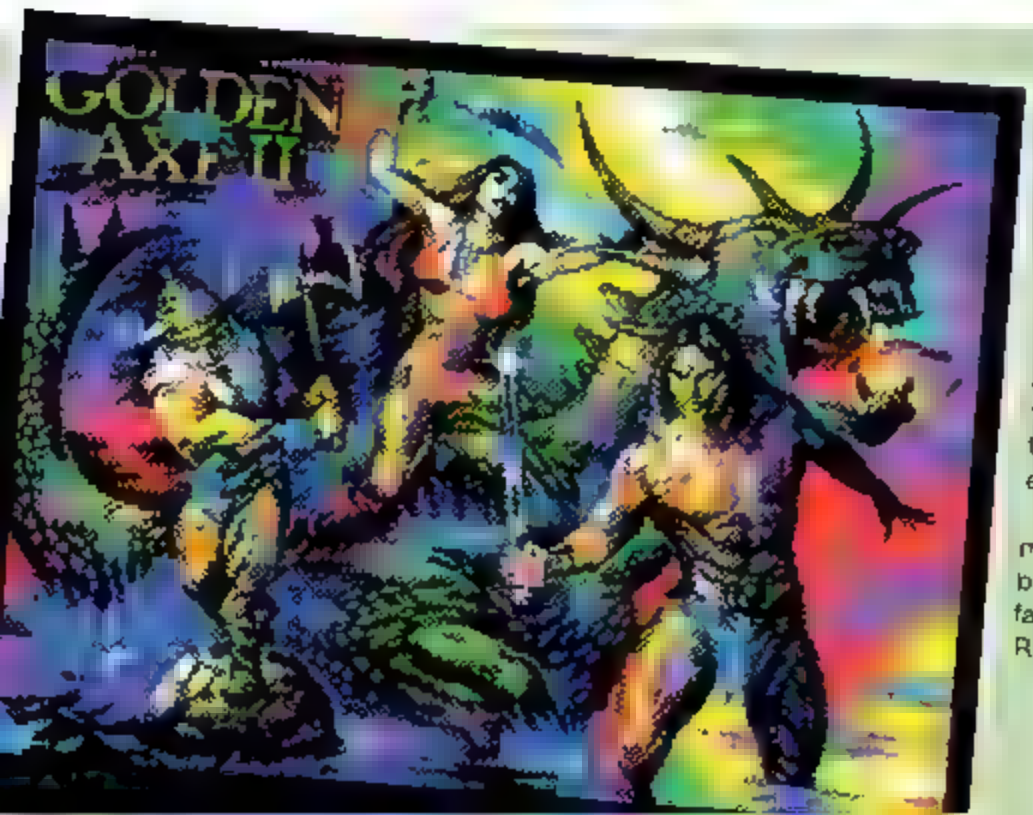
1. **Agent X** *by Mick Farrow* 2014

My first choice is this rather wonderful 007 pastiche that is infinitely superior to the original title screen. It caught my eye because of the bold cartoon graphics, a style which is always a favourite of mine.

This screen by the mysterious Mick Farrow of olde London town is an excellent rendition of the cover art, which in 1986 would have easily tricked me into buying this rather dubious product

I say mysterious because I can't find anything about him other than he does a rather fine line in remakes of classic titles from back in the day. Lovely clean lines in a picture that makes me wish there really was a title with all of these characters in some type of Rick Dangerous spy-based shenanigans.

Who knows, anything's possible these days, eh?



2. **Golden Axe II** *by Oleg Origin* 2016

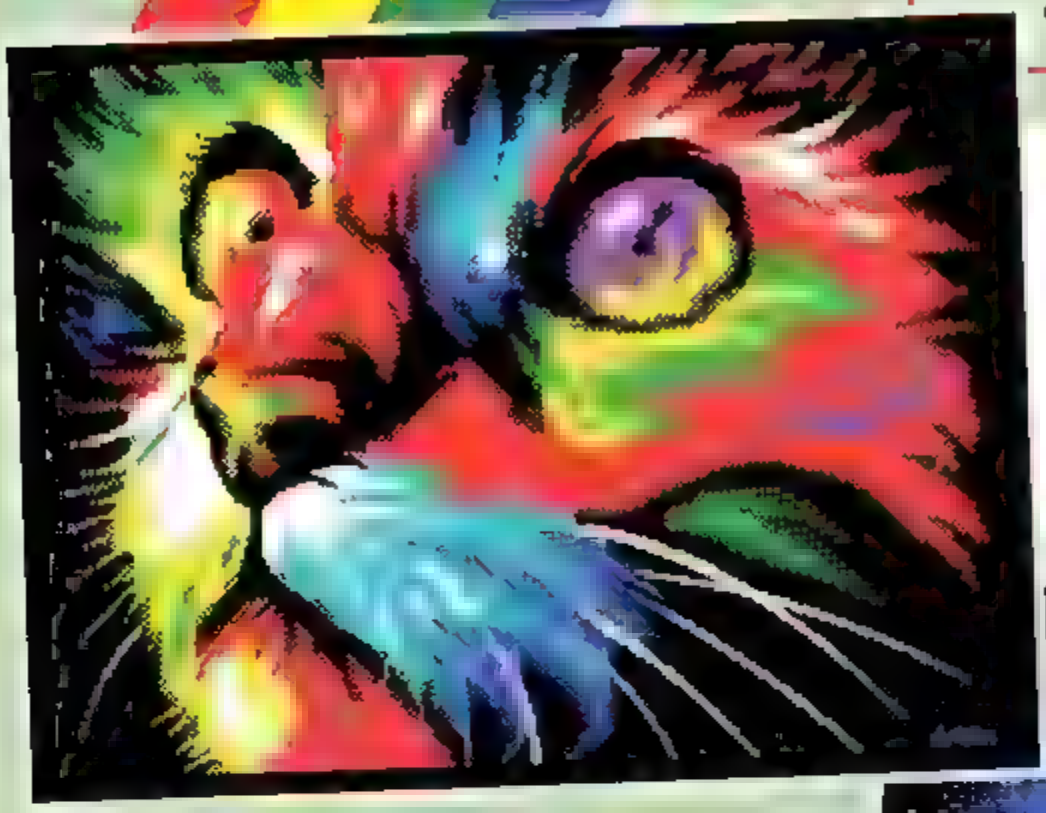
My next choice combines psychedelic colours with a very detailed illustrative style in a sp endid image that more than te s the players what to expect

The dwarf's head may look oversized but th s s not the fault of this talented Russian Spectrum artist. The blame es firmly with the source materia from the king of unimaginative fantasy art, Boris Vallejo This rendition has expertly captured every nuance of static action from a man who had no comprehension of composition, human motion or fluidity of line

Top marks to O eg for a superb mage that hides the attributes with true genius

All this artwork and much more can be viewed at **www.zxart.ee**

Not all of the images I've chosen are game-related, some are just very impressive examples of how to get around the Spectrum's particular graphical restrictions. The next two on this page are present not only because I'm a cat lover, but also because both show in their own way that despite the opinions of the naysayers of the 1980's schoolyards, the Spectrum was indeed capable of displaying some awesome imagery.



4. **Cat** *by Dman* 2017

With the exception of the vertical red area above the cat's nose you could be mistaken for thinking there's nary an attribute on this rather magnificent feline rendering.

Of course the colours are unrealistic, but it's the Spectrum so what on earth does one expect?

Once again, another fine piece of work from Russia and one I'd be proud to have on my wall.

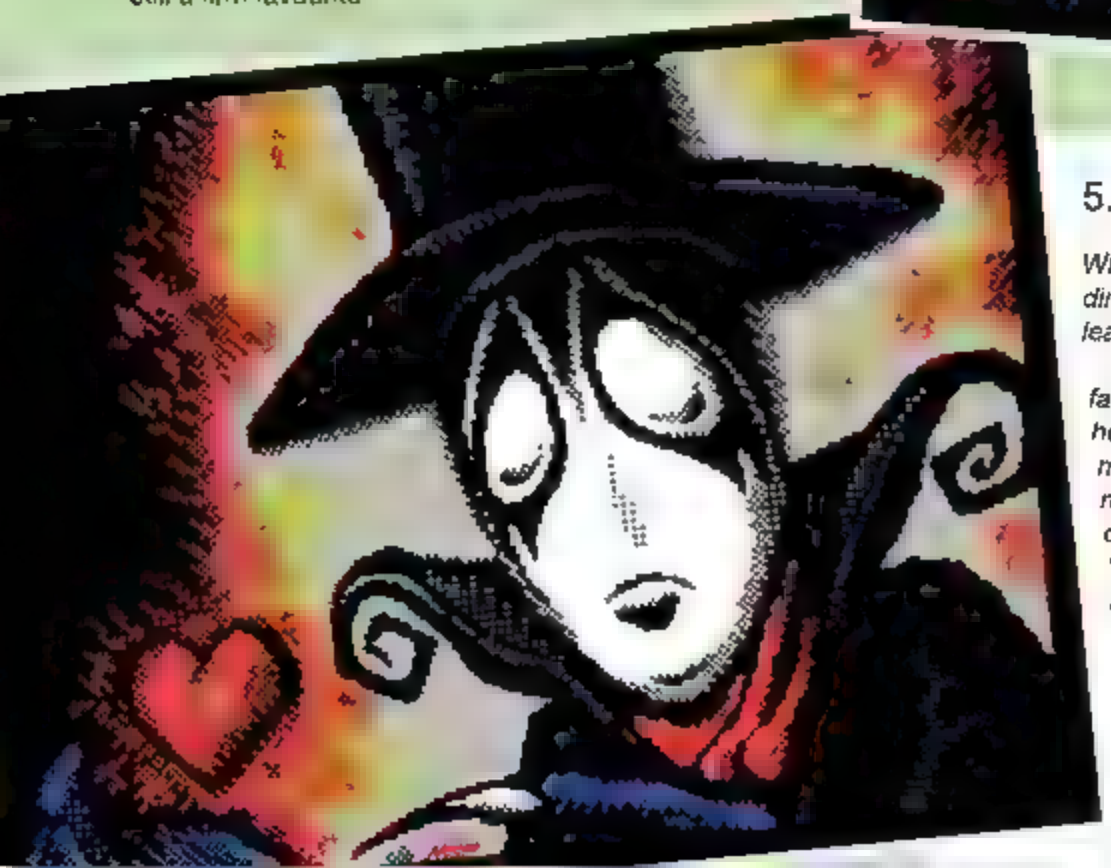
3. **NedoPC by** *KACuk* 2015

I've always been a firm believer in the old 'less is more' adage, so this ticks all the boxes for me. The broken lines in the whiskers really emphasise the play of light on the cat's face and the stippling does suggest the furred coat.

A very subtle but striking image.

The fact that it looks surprisingly like our family cat, Ray, only secured its inclusion in my selection.

The text pulls your eye away from the focus of attention so it loses a few brownie points there, but it's still a firm favourite.



5. **Creator** *by CVM* 2012

While this has more than a smidge of film director Tim Burton about it to my old eyes at least, I still find this very appealing.

It might have something to do with the fact that Heartland and its top hat wearing hero holds a very special place in my gaming memories, but it's certainly down to the morose expression on this rather sombre character's face, combined with the sinister 'claw' reaching threateningly toward the mysteriously floating heart.

All in all another one of those images that makes me wish there was a game to go along with this atmospheric 'portrait'

Simon Butler's SCREEN$

6. **Mr. Heli** *by Ice'D* Year unknown

Stand back and the canary yellow takes on a brassy, metallic sheen, the glass on the cockpit virtually shimmering with Dayglo colours. Strong, thick black linework holds the image together while serving to disguise the limitations so derided by the schoolboy opposition of the day.

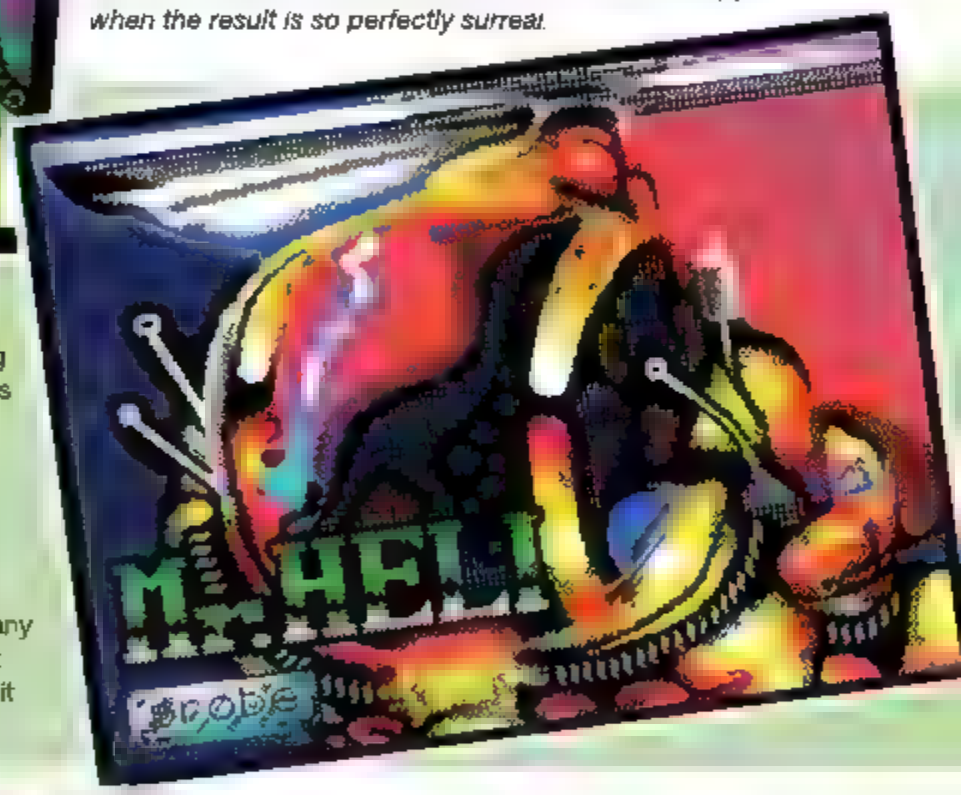
It's a no-nonsense image, no frills or frippery, no trying to include a host of enemies and explosions to suggest the forthcoming action.

Certainly, it doesn't stand up to close scrutiny with some of the shapes to the right becoming rather amorphous and devoid of any real relationship to the front of the craft, but as a whole it works perfectly.

7. **Cursed Eighth** *by Piesiu* 2010

I've never really been a fan of macabre art, yet this struck me as more than a little impressive. The grotesque nature of the image, fallen eyeball not withstanding, is secondary to the excellent use of colour and shape. The little swirls on the plants, the long curling fur on the left, the strange number 8 emblazoned on the cat-creature's forehead, there are just so many tiny details to lead the eye to every corner of this bizarre image.

Why I think it's the Cheshire cat I just don't know, but that is how it strikes me. It's all quite personal and subjective I suppose. Lewis Carroll or HP Lovecraft? Both are applicable when the result is so perfectly surreal.



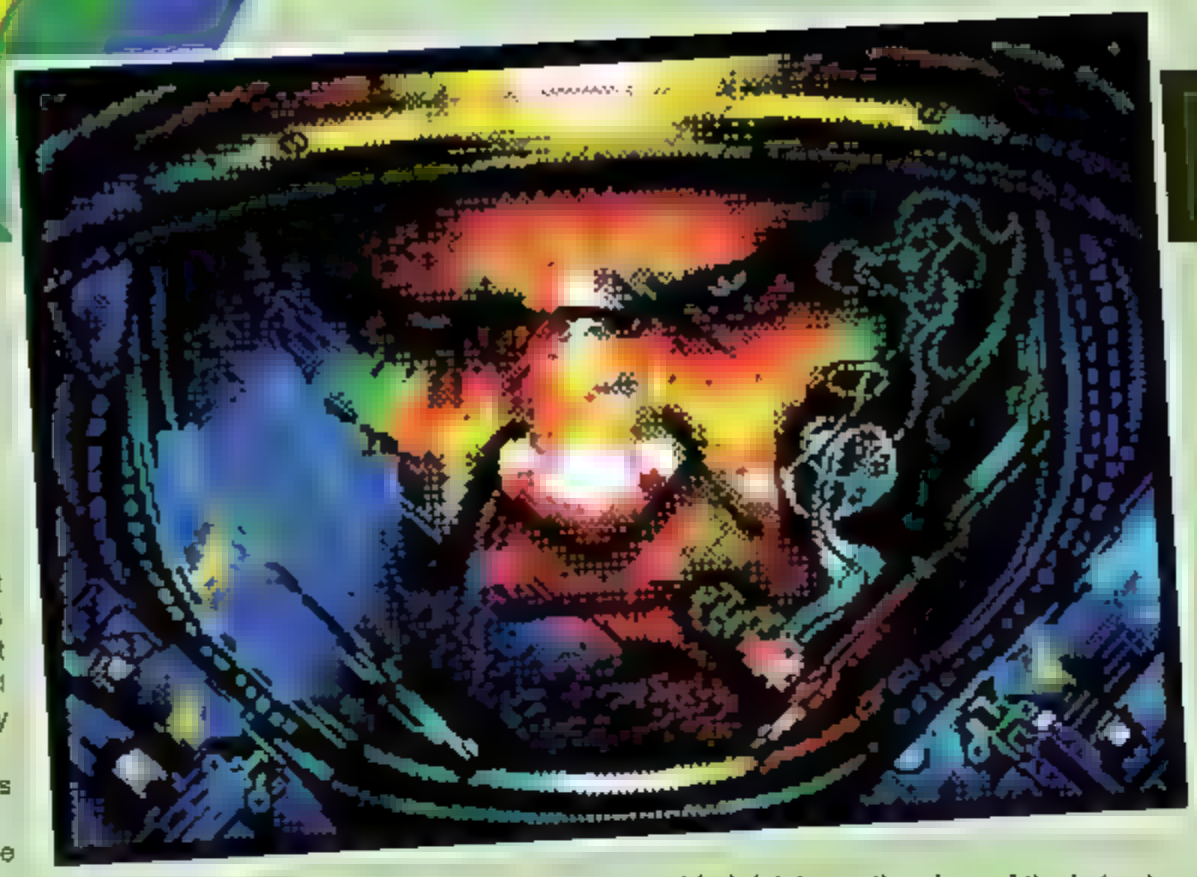
8. **Cybernoid** *by Pheel* 2015

The similarity between this rendering and the actual game art is, to me, quite astounding and while it may rely on simple line work in some areas rather than excessive use of colours the overall effect is simply fantastic. While the explosions are simplistic and the reflections to the bottom left of the cockpit typically Spectrum-esque, when compared to the quite shockingly poor screen that appeared on the game back in 1987, it's obvious that this is a work of genius.

I know full well that I churned out my fair share of below average title screens, so I don't feel I am being unduly unfair in my assessment of the original. Not only is this a great piece of pixelated artwork, it really does bring back some fantastic memories of a game that drove me to despair during many an hour of truly frustrating gaming.

A true gem.

All this artwork and much more can be viewed at [illegible]



9. **The Heaven's Devil** *by Diver* 2014

When I first saw this, I went into denial. I thought there was some voodoo jiggery-pokery involved. Only on closer examination is it obvious that the only dark-arts responsible for this magnificent image are sheer technical skill combined with more than a hefty dollop of unadulterated talent. To produce something of this calibre is the stuff of dreams.

Of course, it is the space marine from *StarCraft 2: Wings of Liberty*, but for this old dinosaur, I'll take the pixelated version over the strangely smooth polygonal image every time.

There's a grittiness here, that is strangely lacking in the hyper 'real' rendering of the PC version and we have tiny added details on the glass of the helmet and around the armour below. The face is superbly drawn, right down to what I see as a scar on the bridge of his nose.

The helmet's edges catch the light wonderfully, framing the image to perfection. This truly is one for the ages.

10. **Gift from the Gods** *by MAC* 2016

In a portfolio filled with too many truly amazing pieces to even comprehend, this exceptionally talented young Spanish chap has created an image that is one of my favourites for a variety of reasons.

First, I was on 'the scene' way back when the grand wizard of the Spectrum, Mr John Gibson, created the original title. Second, it's light-years ahead of the title screen that accompanied the game in 1984 – a workmanlike item that was simply rather unimaginative.

Finally, this particular image has just about everything a loading screen could ever need. A rendering of the box art as tight as you'll ever see, combined with the game's title, the Ocean logo, the developer's name and the artist's nom de plume tucked neatly bottom left. Mac's online portfolio contains so many unbelievable pieces of work I was at odds which to choose, but in the end, this had to be the one. He has even created a rather splendid piece of work featuring my least favourite yolk-based game character.

It's images like this that make me ashamed of the things I trotted out with little or no thought back in the day and I know I wasn't the only guilty party. We either didn't try because we didn't have the time or we just couldn't be bothered. It was a case of 'get things done, collect your bonus and move on to the next product'. But hopefully that will change with the advent of the all-singing, all dancing ZX Spectrum Next, which will no doubt force at least one or two crusty old curmudgeons out of their caves and back to the workface to see if we've still got what it takes.

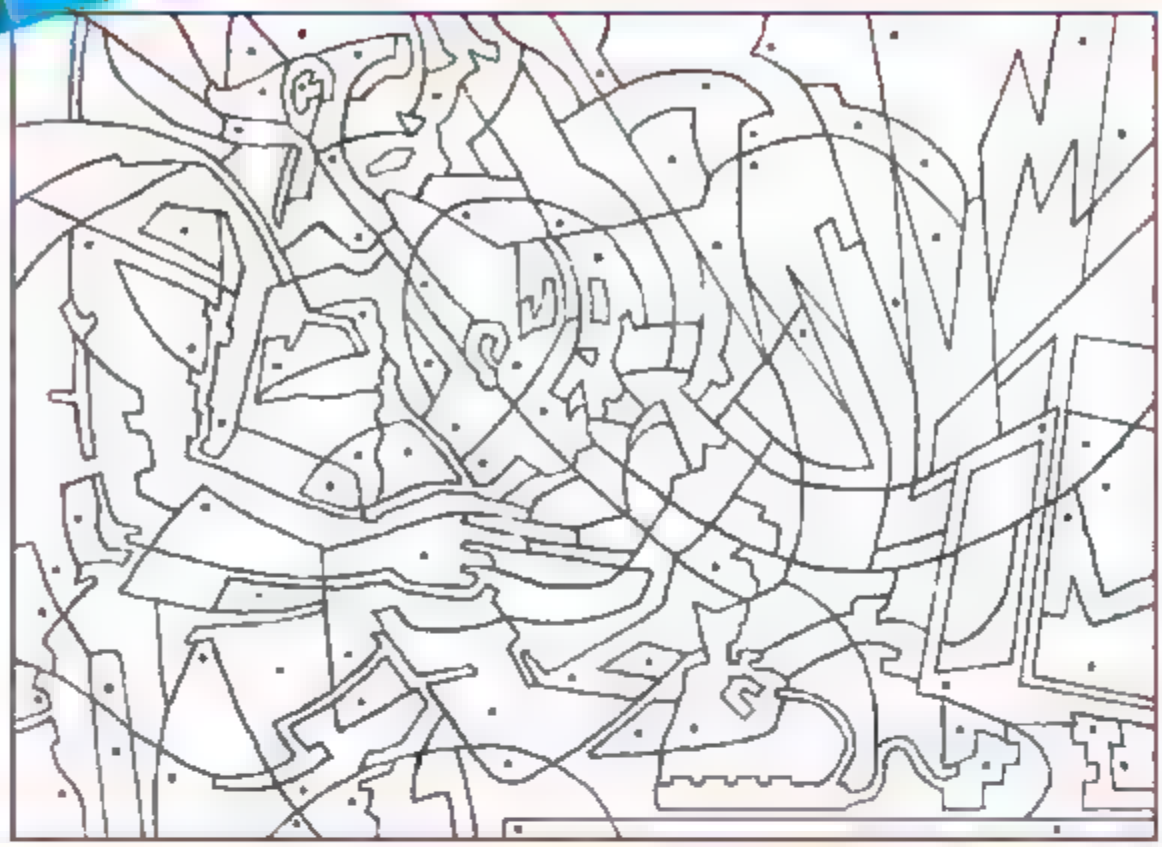
CRASH D.I.Y.

FUN, FUN AND MORE FUN!

Reveal the images Oli has hidden in the two puzzles on the right. First **PIXEL BLOX**: simply fill in those shapes containing a dot and watch the picture emerge before your very eyes!

On the other page, **JOIN THE DOTS**. There are two sets of dots identified by green numbers and red numbers. Start at Number **1** in each set to reveal the secret picture *Whooo*... what can it be?

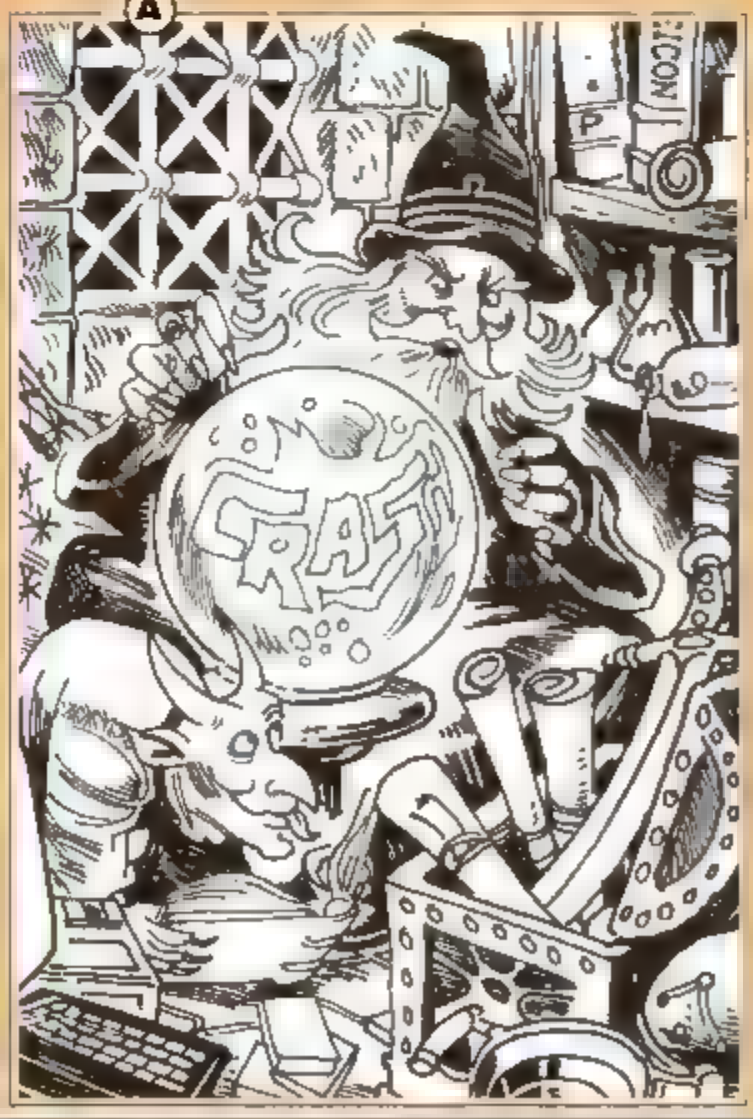
Why not colour in this one too!



SPOT THE DIFFERENCE

Examine the two illustrations below carefully. They might at first glance look identical but in fact there are **12 differences** to be found between **A** and **B**. Once upon a time you could have ringed the differences in picture A, cut it out (and – gosh – damaged your precious copy of the magazine), sent it in to CRASH Towers, and hopefully you might have won an amazing prize..., but those days are long past. Sorry!

A



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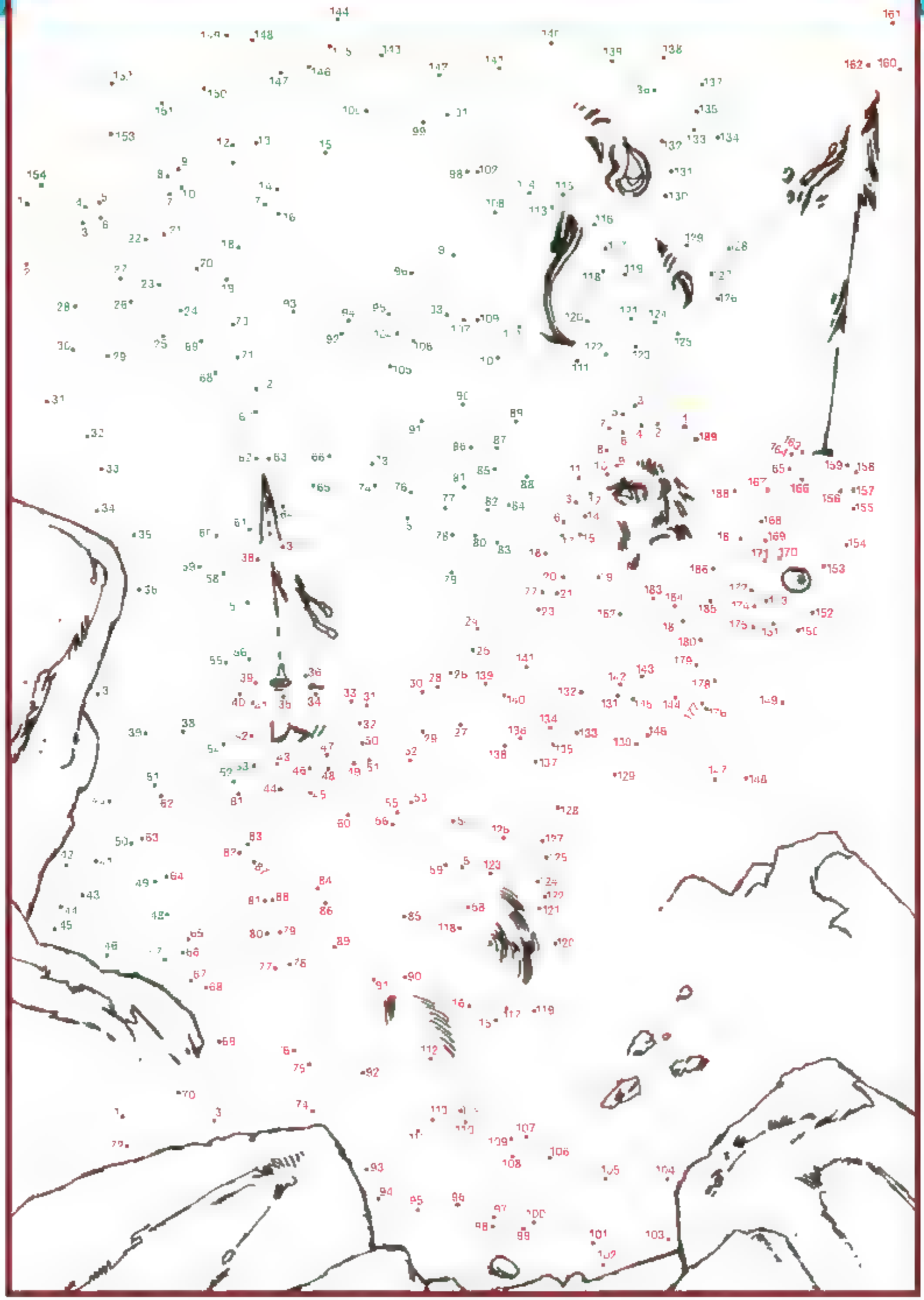


CRASH Back

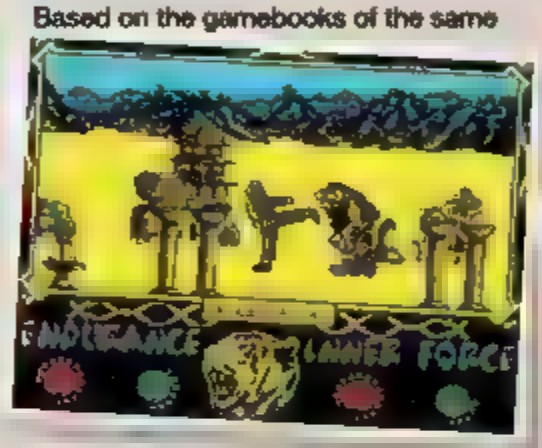
They were great games but they didn't hit the top score – perhaps today they would. We look back at some old favourites in nine categories and reassess them as being worth 100%!

of which need to be deployed in assorted ways in order to defeat each enemy. Excellent graphics and sound complete the package – just don't bother with its lamentable sequel.

Way Of The Tiger

Gremlin Graphics 1986 93% #28

This caught the CRASH team by surprise, but is none the worse for it. Based on the gamebooks of the same



name, the game takes place over three sections, from hand-to-hand combat, to a battle with quarterstaffs on a bridge and, finally, samurai swords.

Technically a beauty (it was the first game we noticed with triple scrolling and animated backdrops) *Way of The Tiger* is also a fine game, and still worthy of its CRASH Smash.

Barbarian: The Ultimate Warrior

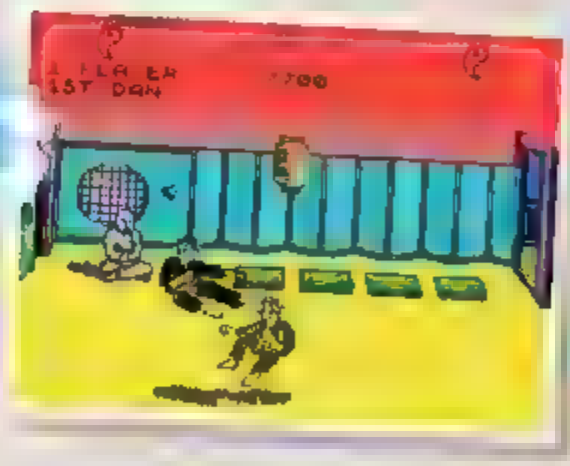
Palace 1988 85% #41

There was no escaping *Barbarian* back in 1987 thanks to Palace Software's controversial advertising campaign that featured a scantily-clad page three model by the name of Maria Whittaker. The game isn't bad either and just missed out on Smash status with a good score considering how disenchanted the reviewing team were with fighting games. Playing the titular hero, it's your job to take on the villainous magician Drax and free the comely Princess Mariana. Now there's a prize worth fighting for.

Way Of The Exploding Fist

Melbourne House 1985 92% #21

We waited for what seemed like ages for this Commodore 64 hit to appear on the Speccy back in 1985, and it was well worth the wait. A pure one-on-one beat-'em-up, the technical aspect and speed of play greatly impressed our reviewers, and it remains the pinnacle of karate games on the Spectrum today. While



one-player mode is ace, the two-player option is where it's at – nothing beats the feeling of bashing your mate in the chops before dealing a devastating roundhouse kick.

Yie Ar Kung Fu

Imagine 1985 92% #25

One of a wave of excellent arcade conversions from Imagine, *Yie Ar Kung Fu* boasts greater variety than many of its peers thanks to its range of enemies to challenge our Oriental hero, Oolong. It features nine different opponents and an assortment of attacking moves, each

Knight Lore

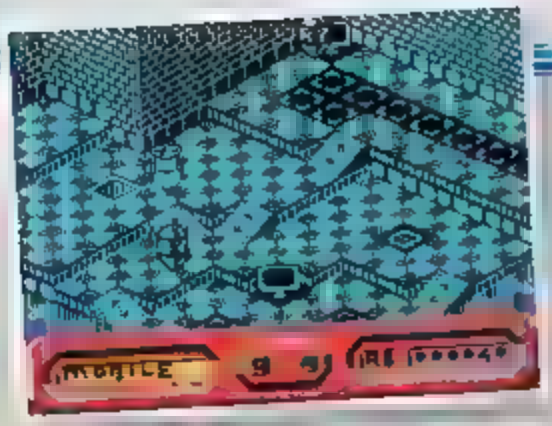
Mikro Gen 1984 94% #12

It may have been superseded by others in the genre, but there's no doubting Ultimate's *Knight Lore* is still one of the most influential games on the Speccy. Released alongside *Underwurlde* it starred that loveable explorer Sabreman once more, this time afflicted by a lycanthropic (LMLWD) curse. *Knight Lore*'s amazing 3D graphics passing each other smoothly and flicker-free set a new benchmark for Spectrum software and created a whole new genre itself. Things would never be the same again.

Quazatron

Hewson 1985 94% #29

Inspired by the Commodore 64 hit, *Paradroid*, Steve Turner's *Quazatron* even improved upon that classic,



introducing a beautiful isometric landscape for that loveable droid, KLP-2, or rather Klepto. Key to *Quazatron*'s success is the brilliant grappling game – no, not a night in a Ludlow pub – it's a mini-game where Klepto can defeat enemy droids and obtain their superior parts. A big hit for Hewson and our reviewers loved it back in the spring of 1986. Still enormous fun today

The Great Escape

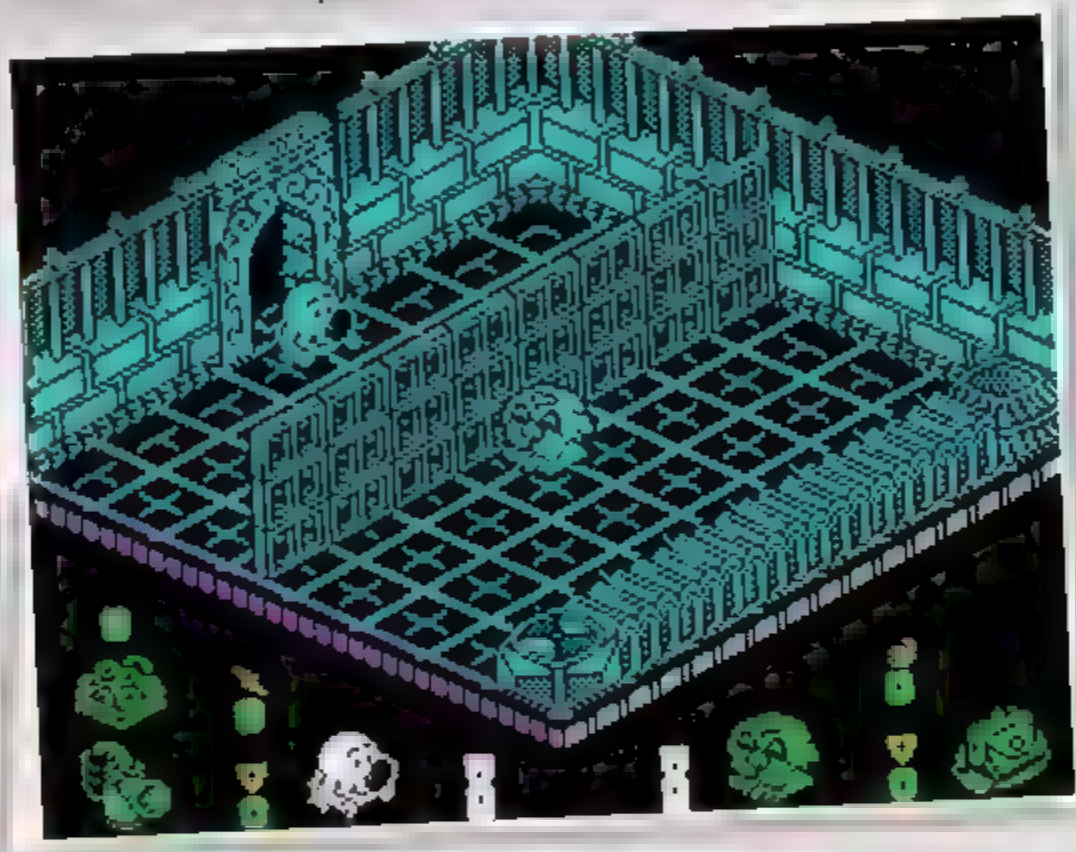
Ocean 1986 · 96% #35

Not only one of the Spectrum's finest isometric games, but one of its finest full stop. For once, the monochrome display suits the game perfectly and our reviewers thrilled to the open world of Denton Designs' World War II prison camp. Stacks of atmosphere, alternative methods of escape, frothing mad guard dogs – *The Great Escape* has it all and thoroughly deserves its classic status. You can even enjoy just letting the hero wander around the camp on his own!

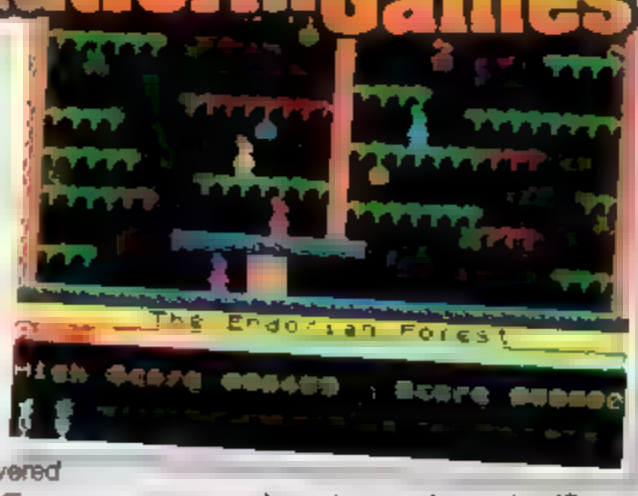
Head Over Heels

Ocean 1987 – 97% #39

Jon Ritman and Bernie Drummond teamed up again for this puzzle-tastic classic. Its USP is the separated characters, each having particular qualities to help solve Ritman's nefarious puzzles, some of which could only be solved using the two characters combined. In spite of Oliver Frey's gloriously over-the-top 'the Evil Emperor is less forgiving than I' cover painting for the game, *Head Over Heels* has a wacky sense of humour and some fabulous in-game graphics by Drummond. It's a true powerhouse of the genre, well-deserved of one of the highest scores in CRASH.



Platform Games



Manic Miner

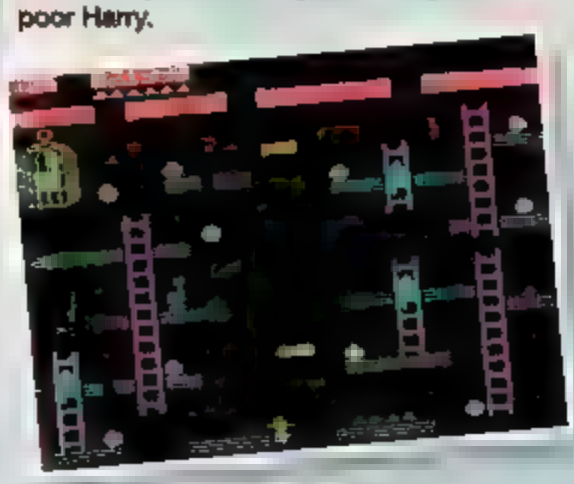
Bug-Byte 1983 – not reviewed

Matthew Smith's brilliant freshman *ZX Spectrum* release pre-dated CRASH by a few months, but is still revered and respected here in CRASH Towers. Featuring 20 caverns (or screens) and in-game music – a real rarity back then – *Manic Miner* is also an addictive platformer which incredibly has rarely been bettered since. If you're lucky enough to own one of the few SAM Coupé computers, its version features improved graphics and an extra 40 screens, and scored 88% in CRASH.

Chuckie Egg

A 'n' F Software 1984 – 80% #2

Nigel Alderton's classic platform game eschews the required pixel-perfect jumping of its peers and focuses more on egg collection – in style. Control famous Henhouse Harry as he warbles around each screen, collecting the eggs before proceeding to the next area. Precise, sharp controls and a brilliantly balanced level of gameplay is what makes *Chuckie Egg* a classic, and it is still a joy to play today, offering thrills aplenty once that giant bird begins homing in on poor Harry.



Jet Set Willy

Software Projects 1984 95% #4

CRASH awarded Matthew Smith's second game a great score, and we still love it as much today as we did then. While some of its more infuriating screens (we're looking at you, The Banyan Tree) may frustrate younger gamers, the sheer imagination and ingenuity of *Jet Set Willy*'s gameplay is as legendary now as 1984. It may be a rip-off, but new purchasers should check out *Jet Set Willy 2* which fixes a few bugs and

Monty On The Run

Gremlin Graphics 1985 94% #20

Neatly avoiding the mis-step of *Monty Is Innocent*, *Monty On The Run* is the direct sequel to Peter Harrap's original that also scored a CRASH Smash. Now, our burrowing friend has escaped from Scudmore Prison, assembled a useful-sounding freedom kit and must make his way from safe house to the cross-channel ferry. We scored 94% to the amazing *Monty On The Run* back in issue 20, and while it's rock-hard, the little fella has still got that magic.

Shoot 'em ups

Starglider

Rainbird 1986 97% #36

We gave *Starglider* its high score for the 128K version. Coded by Realtime Software, it includes a fascinating novella by James Follett which helps set up the fantastic scenario. Taking control of the AGAV (Airborne Ground Attack Vehicle), blasting those dastardly enemy attack forces is just as much fun as it always was, and seeing those Stargliders in full flow is still a thing of beauty to behold

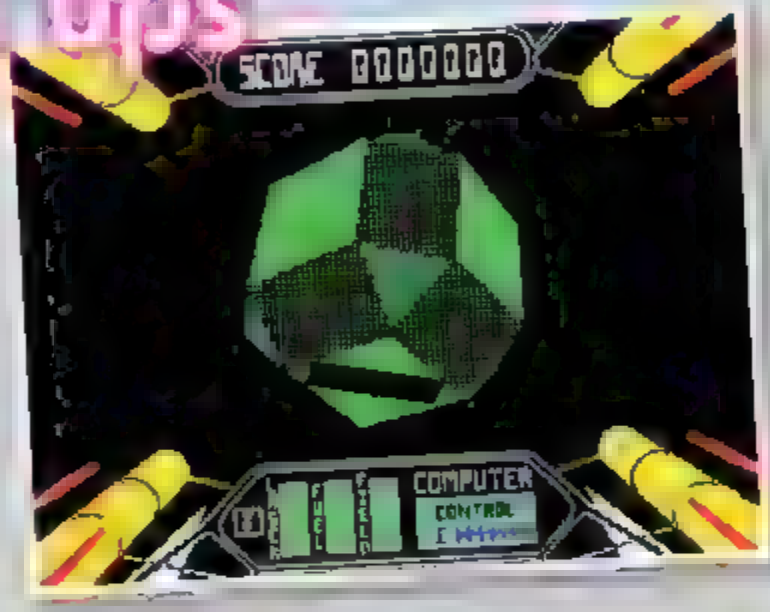
Cybernoid

Hewson 1988 96% #51

Raffaele Cecco's crowning achievement is not only a technical marvel, but also a damn fine game to boot. Cleverly using a flick screen mechanic instead of the common scrolling, the graphics first wowed

Cecco's finely tuned gameplay addicted them for weeks. Destroy the pirates, dodge the

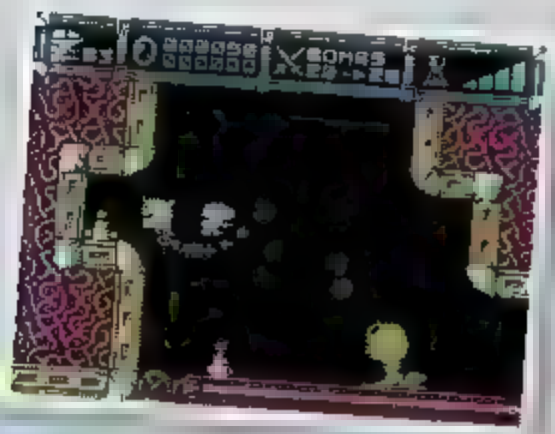
the treasure, helped by some nifty power-ups such as the circling shield that batters all



Starstrike II

Realtime 1985 96% #28

The original *Starstrike* scored 94% in 1984. 18 months later the sequel went two percent better. *Starstrike II* expands greatly on the first game, as the Federation (good guys) takes the fight to the Outsiders (baddies), warping around the galaxy to neutralise each enemy planet. *Starstrike II* added what was needed to *Starstrike*'s smooth and expeditious (LMLWD) graphics: a cohesive plot, and a fine excuse to run around the universe blowing up stuff



R-Type

Electric Dreams 1988 92% #59

There are plenty of worthwhile arcade conversion shooters on the Speccy, but none as superb or accurate as the legendary *R-Type*. Given the coin-op's outstanding graphics, Electric Dreams did a miraculous job keeping not only the colourful sprites but also playability of the original intact. It may not be the easiest game out there, but thanks to the numerous power-ups and inventive enemies, *R-Type* is still, to this day, a genuine classic. Blast off against the Bydo Empire.

RACING GAMES

Deathchase

Micromega, 1984 – 92% #1

Deathchase was released a few months before our first issue, but we thought it should be included, a decision vindicated as it received one of our first CRASH Smashes. Coded by Mervyn J. Estcourt (where is he now?), it's pure gameplay as you power your way through an increasingly-dense forest, dodging trees and shooting enemy bikers, tanks and choppers. In only 16K, it's a technical marvel and one of the Speccy's greatest games of all time

Turbo Esprit

Durell, 1986 88% # 28

While it narrowly missed out on a CRASH smash, the reviewers always had a penchant for racing games that added a certain frisson to the

gameplay. Its grim urban landscape perfectly matches the game as you race around the city trying to capture those awful drug dealers. Negotiating your way around a living, breathing city takes skill – and is a whole lotta fun, even to this day. And it had shooting, too!

Enduro Racer

Electric Dreams, 1987 – 92% #40

To say our reviewers were a little surprised when this arrived in time for the May issue would be no understatement; Electric Dreams had had an uneven recent record, and the arcade game was fast-moving and beautiful. Yet the publisher confounded us all with a remarkable conversion that contains some of the finest visuals ever in a Speccy racing game. Smooth scrolling and lightning-fast gameplay completes what is not only a great game, but also one of the Spectrum's finest arcade conversions.

Chase H.Q.

Ocean, 1989 – 95% #71

The wildly popular coin-op of the late 1980s was duly secured by Ocean for transportation to the ZX Spectrum, and the boys from Manchester didn't let fans down. Featuring much of the gameplay from the original, *Chase H.Q.* is all high-speed thrills as you chase down baddies against a strict time limit with advice from Nancy at H.Q. Sleek and smart, our reviewer Nick Roberts declared Speccy *Chase H.Q.* 'as playable as the real thing' Steady on there Nick

Simulations

Fighter Pilot

Digital Integration, 1983 86% #2

Digital Integration cemented its reputation as simulation kings with this

accurate and exciting Tomcat combat game. Coded by Dave Marshall, an ex-RAF engineer, the game uses real-life cockpit instrumentation and authentically replicates the effects of speed, altitude, flaps and so on. There's plenty of shooting action as well, and a useful practice mode that automatically positions your aircraft in the air near an enemy plane. Not a great looker today, but still an ace.

Tomahawk

Digital Integration, 1985 – 93% #23

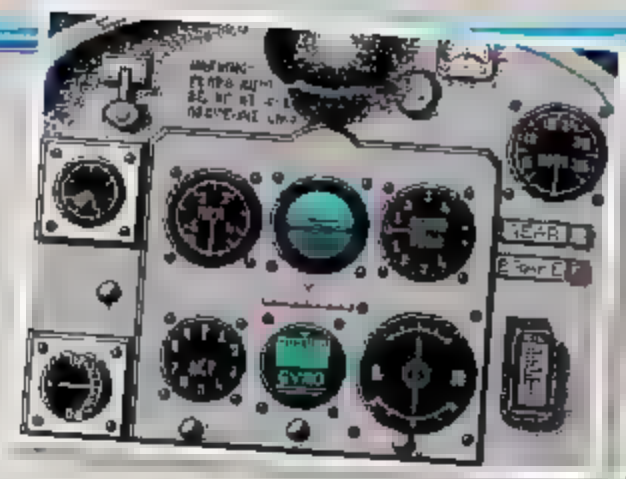
Digital Integration's follow up to *Fighter Pilot* took two years and exchanged fixed wings for rotors. Programmed once more by David Marshall, the

player takes control of an Apache helicopter, flying a series of missions across the digitised landscape. While admittedly almost as tough to get to grips with as its predecessor, *Tomahawk* has better graphics and benefits from the relative ease of control of a chopper over airplane. Despite pretenders to the throne such as Microprose's *Gunship*, it has yet to be bettered.

Spitfire 40

Mirrorsoft, 1985 90% #26

Sitting in the cockpit of the famous fighter plane wowed our reviewers in March 1986. The Battle of Britain is at its height in the summer of 1940 and the Luftwaffe is constantly hassling Blighty with bombers and fighter escorts. The game has three modes, practice (flying training), combat practice and combat itself which thrusts you into the cauldron of World War II. Accurate, complex and

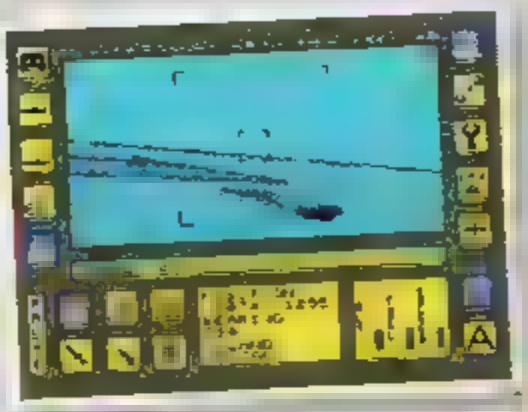


entertaining, *Spitfire 40* is still a great game. Chocks away!

Carrier Command

Rainbird, 1989 **97% #63**

In 1989 the boys at Realtime did it again, creating another wire-frame graphics extravaganza (LMLWD) for Rainbird. *Carrier Command* is a futuristic simulation as the player takes control of, well, an aircraft carrier, defending against enemy attacks while launching deadly Manta attack aircraft against the various island defences. Originally a 16-bit game, *Carrier Command* took a while to reach the Speccy but is nevertheless an excellent and thoroughly absorbing strategy-cum-simulation.



Sporty Games

Hyper Sports

Imagine, 1985 **92% #19**

Imagine out-Daley'd *Daley Thompson's Decathlon* with this cracking conversion of the coin-op arcade game. Containing six events, including swimming, archery and skeet shooting, *Hyper Sports* was praised for its slickness and presentation and duly CRASH Smashed. Coded by Jonathan Smith,

good it is too, offering seven different events set over two LOADS. Beautiful graphics and an excellent, fast pace to each individual event created a new standard for multi-event software in the mid-80s. As we concluded back then, 'all in all, a great package'

it makes up for having less events than the coin-op with sheer playability and authenticity to the original. Still probably the best Speccy track 'n' field game ever.

Winter Games

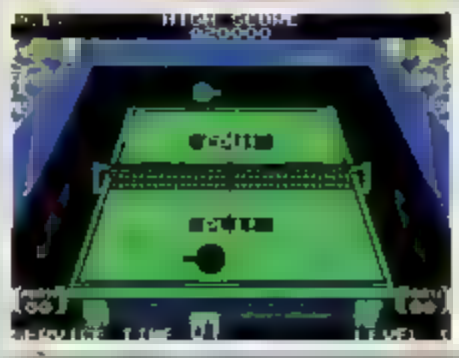
US Gold, 1986 **93% #26**

Not to be confused with Electric Dreams lamentable *Winter Sports* (reviewed in the following issue, and scoring just 43%), this was US Gold and Epyx's first attempt at replicating the success of its Games series on the Spectrum. And pretty

Ping Pong

Imagine, 1986 – **90% #28**

Coded by Bernie Duggs, *Ping Pong*'s sheer playability draws you in before the difficulty ramps up, creating that elusive just-one-more-go factor. The genius move by Duggs was to avoid player representations – you control a floating bat which can be manipulated



and timed to control the speed and direction of the ball. Brilliant sound completes the package.

Match Day II

Ocean, 1987 - **91% #48**

Match Day creator Jon Ritman never let us forget that his first game didn't get a Smash, while readers kept voting it into the charts for years after release. So the Smash for Jon's follow up was entirely deserved. An improved league and cup system, different strength kicks and Ritman's pioneering diamond deflection system all added up to the most advanced footie game on the Spectrum at the time.

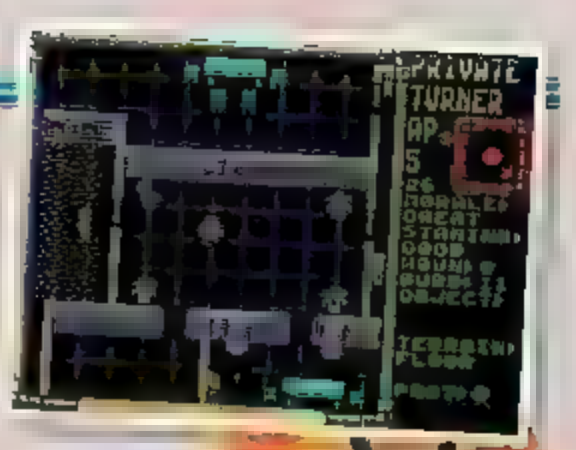
Strategy Games

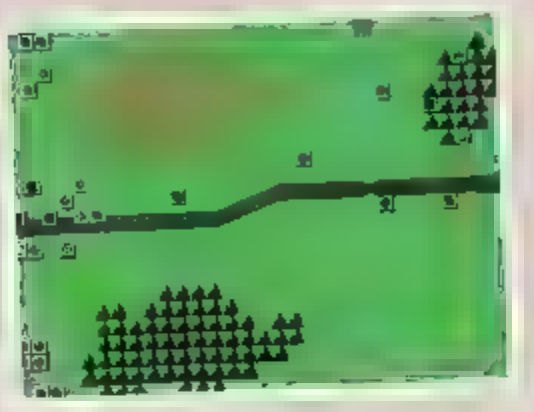
Chaos

Games Workshop, 1984 – **8/10 #16**

Reviewed by Derek Brewster in the May 1985 issue, *Chaos* narrowly missed out on a Smash in our strategy section. While nothing special to look at, Julian Gollop's spell-casting classic has addictiveness and depth in spades, and accrued a legion of wannabe wizards since its release. In particular, the multiplayer function makes for an afternoon of magical entertainment with a friend.

CRASH Back





Adventure

Johnny Reb II

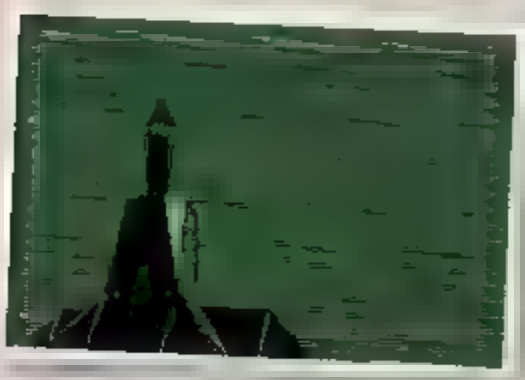
MC Lothlorien, 1986 82% #33

No Spectrum strategy list would be complete without an entry from MC Lothlorien, and by October 1986 the wargame experts had reached their peak with this American Civil War sequel. Sean Masterton offered a history lesson in his review, praising its ease to get into, yet underlying complexity, hallmarks of Lothlorien. A decent one-player mode (so often lacking in strategy games) and some excellent presentation also helped Sean recommend *Johnny Reb II*, despite reservations about the price.

The Sentinel

Firebird, 1987 97% #40

Only a very small body of games achieved such a lofty score in CRASH, none has scored better *The Sentinel* impressed our regular reviewers who called it 'state-of-the-art' and 'jam-packed with atmosphere and nail-biting tension'. Startlingly original – and deceptively simple – this absorb-'em-up from Geoff Crammond rightly deserves its place at the CRASH top table and is one of the most thought-provoking games of all time.



Laser Squad

Blade Software 1988 89% #59

After the success of *Rebelstar* and its sequel, Julian Gollop and brother Nick gave us this vastly improved update in December. Offering line-of-sight opponents, multiple missions with varied enemies, an armoury (to be selected before each mission) and an improved movement system, *Laser Squad* remains an amazing strategy game to this day. How Philippa Irving didn't give it a CRASH Smash we're still not sure because *Laser Squad* is the pinnacle of turn-based Spectrum strategy.

Redhawk

Melbourne House, 1986 91% #29

Redhawk was a refreshing change to the mass of fantasy-themed graphic text adventures. Playing the eponymous hero, you switch between the superhero and photographer alter-ego, nabbing villains and snapping the results to get cash from the local newspaper, before coming face to face with several supervillains who plan to blow up the city. The cads! An original comic-book style adventure that's still fun, although die-hard adventure fans may find it a bit easy.

Jinxter

Rainbird 1988 – 92% #51

In the last years of the decade text-only adventure games had to be a bit special to get noticed, and Magnetic Scrolls' *Jinxter*, follow up to *The Pawn* and *The Guild Of Thieves* is stunning. Published with Rainbird's usual presentational flourish, *Jinxter* is set in the land of Aquitania, a place cursed with bad luck. As the ubiquitous hero you must recover the five lucky charms to restore the balance. Logical puzzles, an excellent parser and amusing responses help make a most mirthful adventure.

Price of Magik

Level 9 1986 94% #30

The Austin brothers of Level 9 were the undoubted kings of the adventure genre in 1986, and many still regard this as their crowning achievement, including CRASH's Derek Brewster. A follow-up to the also-fab *Red Moon*, *Price of Magik* propels the player into the role of a mystical sorcerer, summoned to do battle with the crazed wizard Myglar. As with many Level 9 adventures, the detail is stunning, and the interaction with the program hugely

The Boggit

CRL 1986 90% #32

Humour can be a difficult thing to achieve in adventure games, but there's no doubt Delta 4 nailed it with *Bored Of The Rings* and this wonderful sequel subtitled *Bored Too*. Derek Brewster certainly had his funny bone tickled as he took a stroll through the world of Bimbo that pokes fun at JRR Tolkien's classic story, at one point even placing the player inside a bizarre TV quiz show with Dwarvish treasure up for grabs.

FOGGY'S QUEST

TO NARG AND BACK AGAIN!

48k

128k

A grand adventure featuring Foggy! The inter-dimensional traveller and explorer. One fine and sunny day Foggy decided to take a trip to the uncharted Dimension 52b! On arrival though, the inhabitants attacked his ship! They craved the technology and Proceed to dismantle poor Foggys' ship. Now he's stuck. He has to find the missing parts of his ship; Three Prismatic Power Crystals and the most important part, the Dimension Spicer! Then find the ship and get out of there.

KEYBOARD OR JOYSTICKS

128k CASSETTE VERSION

POWERED BY AGD ARCADE GAME DESIGNER

Designed and Programmed by

JOHN BLYTHE

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CRASHED BURNED

THE LOST TAPES

With more than 10,000 games released for the Spectrum it hardly surprises that a few titles never made it. Some were cancelled during development while others were never published despite being finished. What [illegible] uncertain intrigue for fans as we speculate [illegible] mind, **Martyn Carroll** delves into the CRASH archive to find interviews, previews and even [illegible] some of the greatest Spectrum games that never were. And don't forget, there are [illegible] closed books here as [illegible] lost tapes may one day be found.

THE EYE OF THE MOON

Of all the many unreleased Speccy games surely none are mourned as much as the final entry in Mike Singleton's epic *Lords of Midnight* series. Expectations were high from the off, with the game teased in the manual to the first game: 'There will be two more games making up a Midnight trilogy. *Doomdark's Revenge* details Luxor's quest to rescue Morkin and *The Eye of the Moon* is the story of Morkin's search for the magical jewel which can look into the future.' The game was to take place in the warm lands south of Midnight and Mike started to work on the game shortly after Beyond Software published *Doomdark's Revenge*.

For the March 1985 issue, CRASH editor Roger Kean travelled to Liverpool to interview Mike, and talk eventually turned to the third Midnight game. '*Eye of the Moon* will probably stretch the [landscaping] technique as far as it will go,' Mike revealed. 'I don't think you can get much more out of the Spectrum.' Nothing then happened for a couple of years, but in the June 1987 issue Mike reassured readers that he was still working on it. 'I've been constructing some new graphic routines so that the landscaping should be in full colour,' he said. 'Oh, and the map should be about four times the size of *Doomdark's*.'

It transpires that the main reason for the delay was a contract dispute with Telecomsoft following its takeover of Beyond. When that was resolved, Mike found himself preoccupied with *Dark Sceptre* and *War in Middle Earth*, so *Eye* was delayed once more. In 1995 Mike developed *The Citadel*, a Midnight game for the PC, but he was adamant that it wasn't meant to replace *Eye* and that one day it would happen. Indeed, he returned to the game in 2011 with a plan to release it for touch-screen devices. Unfortunately Mike passed away in 2012 aged 61, and with sadness *The Eye of the Moon* closed

BANDERSNATCH

Aha, this was the infamous 'Mega Game' from Imagine Software. First previewed way back in the April 1984 issue of CRASH and then heavily advertised by Imagine in the following months, this was supposed to be the arcade adventure that would make all other games obsolete.

It was so advanced that it wouldn't even run on a bog-standard Speccy. It required a special ROM add-on which would be packed with fantastic graphics, animation and sound. It sounded great, but there was a catch. The RRP was around £40, at a time when most games retailed for £5-10. Before a screenshot could be shown, Imagine was declared bankrupt and the game's vapourware status was secured.

That said, the game's programmer John Gibson later resurrected much of the code for Denton Design's *Gift from the Gods* – a great game that managed to fit inside the Speccy's memory without the need for any fancy Imaginative hardware.

SCOOBY DOO IN THE CASTLE MYSTERY

Readers of the October 1985 issue will no doubt remember seeing a double-page preview that showed cartoon-quality screenshots. Those meddling kids at Elite Systems had seen the laserdisc game *Dragon's Lair* from Cinematronics and believed they could achieve something similar on the Speccy. They even billed it as 'The first ever computer cartoon'.

Almost needless to say from seeing the screenshot, the massive Scooby and Shaggy sprites quickly clogged up the memory and there was no space left for the actual game. A multi-load scheme was proposed, where each 'scene' would load up as required, but it simply wasn't workable and the whole project was Scrappy Doo-ed.

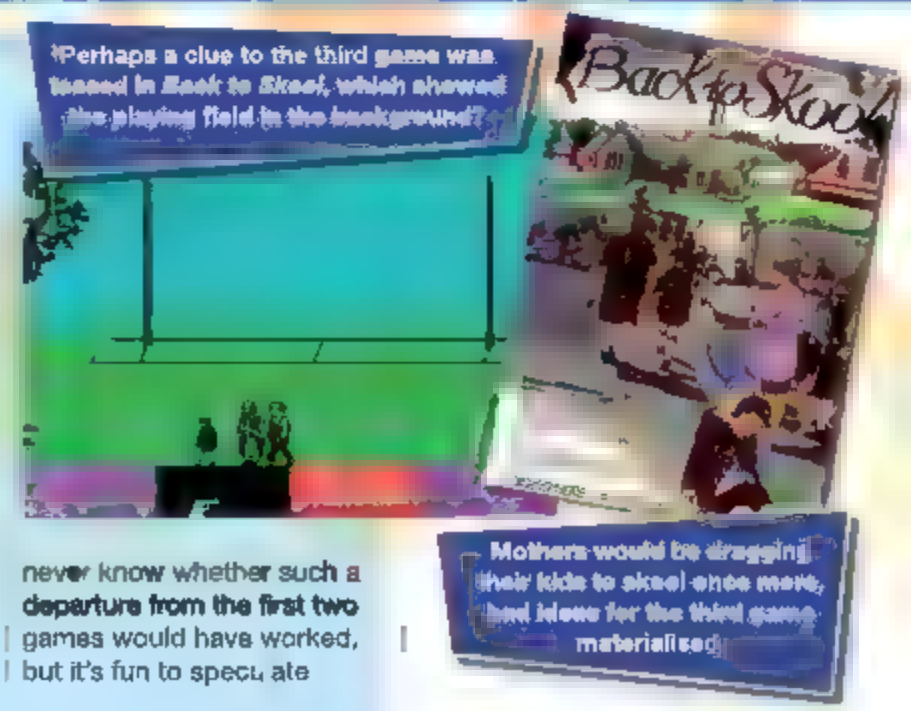
With the licence paid for, Elite commissioned Gargoyle Games to produce a more traditional *Scooby Doo* platform title which was released the following year, earning 91% and a CRASH Smash. All's well that ends well.

SKOOL DAZE 3

Young Erics everywhere jumped for joy when Microsphere's Dave Reidy revealed in the February 1986 issue that there would be a third game in the 'Skool' series, following *Skool Daze* and *Back to Skool*. Celebrations were short-lived however, as Dave went off and produced the crime caper *Contact Sam Cruise* before quitting the games business.

Years later he revealed that he did start work on the third game, which had the tentative title of *Eric and Hayley's Decathlon*.

That's right, the game was to be a parody of Decathlon-style games featuring ten sports-day events in which Eric, his girlfriend Hayley and assorted scoundrels took part. In fact, Dave's regular artist Keith Warrington even completed the cover painting for the third game, which was a twist on his earlier *Back to Skool* art and showed Eric hurdling over the school fence. We'll never know whether such a departure from the first two games would have worked, but it's fun to speculate.



CRASHED BURNED

HORACE TO THE RESCUE

Surely everyone remembers Horace, the globular hero of three ancient Spectrum hits – *Hungry Horace*, *Horace Goes Skiing* and *Horace and the Spiders*. He was supposed to return for a fourth game, *Horace to the Rescue* in 1985. Oz programmer Steve Taylor revealed in an interview in CRASH (April 1987) that this was his first project when he joined Beam Software. Steve was working under Horace creator William Tang, but unfortunately William fell ill during the development and the game was shelved with no screenshots released. The plot involved heroic Horace rescuing a princess.

Horace would return however (and we don't mean his cameo appearance in *Inspector Gadget and the Circus of Fear*). In 1995 an official Horace game titled *Horace in the Mystic Woods* was released for the Psion 3 PDA thingy. This in turn was ported to the Speccy in 2010 by Bob Smith, so Horace did eventually return to his spiritual home.

Not *Horace to the Rescue*, but he would return for *Horace in the Mystic Woods*. Compare the original PDA version above with the later Spectrum port.

JUDGE DEATH

CRASH really threw its support behind this game based on *2000 AD*'s Judge Dredd stories, and even collaborated with Titan Books to include a 16-page comic pullout in the December 1987 issue. It was to be a shooting gallery game in which you (as Judge Anderson) had to defeat Judge Death and the other Dark Judges. It was being developed by Andromeda Software, best known for converting Atari's *Crystal Castle* to the Speccy.

The same issue of CRASH that included the comic was supposed to carry a review of the game but the release date kept slipping. Then in 1988 Macmillan decided to shut down the game's publisher Piranha and *Judge Death* was left in limbo. We later reported that Alternative Software snapped up some of the assets but the game clearly wasn't part of the deal. In recent years the C64 version has surfaced so we may see the Speccy game someday.

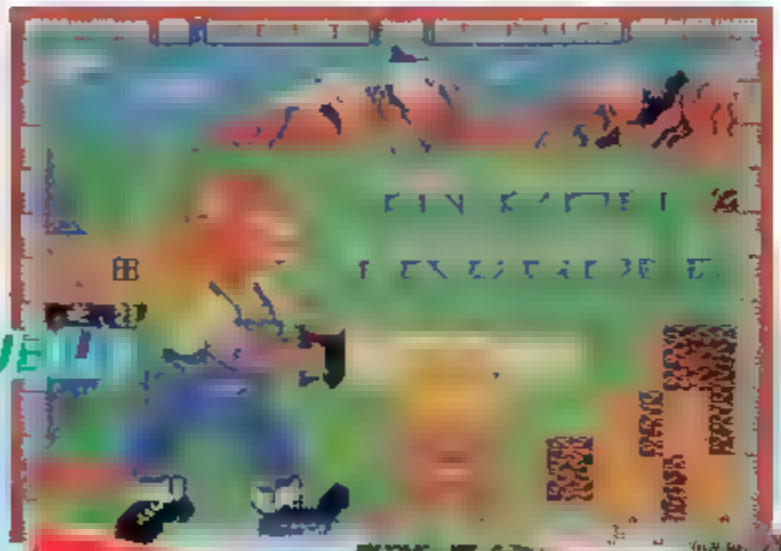
BEAV[illegible] [illegible]AM TROUB[illegible]

For this arcade platformer aimed at younger gamers, Gremlin enlisted the help of arty CRASH readers to create a loading screen for the game. The results of the competition were published in the March 1985 issue of CRASH where it was revealed that the winner was P J Seymour of Newark, Notts. He bagged £100 and the grand honour of having his winning screen slapped on the front of the published title.

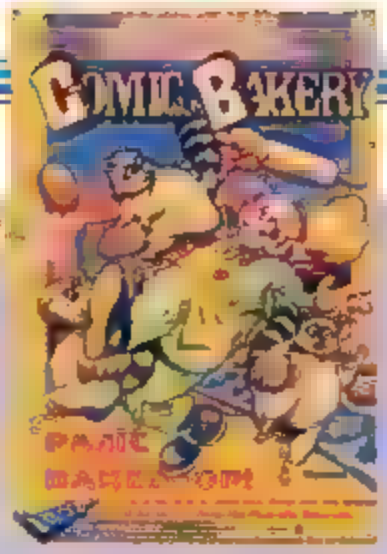
The only problem was that there was no actual game.

Programmed by Christian Urquhart of *Hunchback* and *Daley Thompson's Decathlon* fame, *Beaver Bob* was due out at around the same time that we published the competition results.

Gremlin Graphics continued to advertise the game heavily up to July 1985 before they quietly killed it. The exact reasons why are unknown, although we can perhaps assume that Gremlin felt Beaver Bob was no match for dear old Monty Mole.

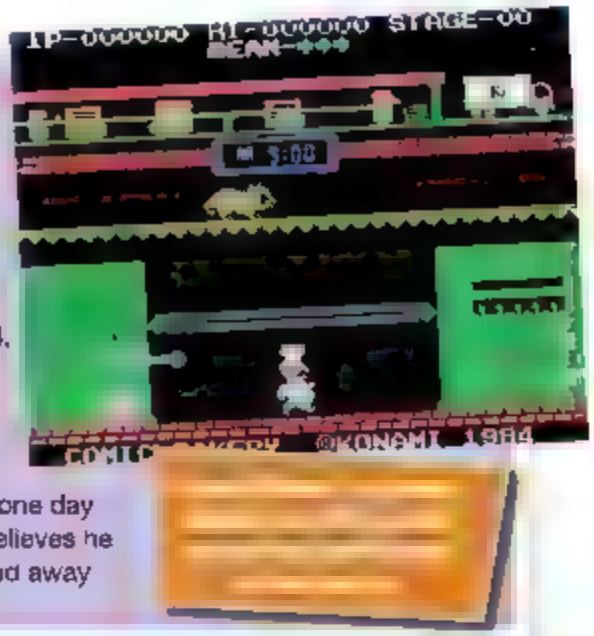


COMIC BAKERY



An Ocean advert in the March 1986 issue revealed a quintet of Konami conversions for the Spectrum on the Imagine label: *Mikie*, *Yie Ar Kung-Fu*, *Ping Pong*, *Hypersports* and *Comic Bakery*. Now obviously the first four all arrived – and very good they were too, but where the bready hell was *Comic Bakery*?

Programmer Steve Lockley reveals that Oasis Software (the company behind the Laser Basic utility, published by Ocean) asked him to do the conversion and it was "finished or all but finished" when Oasis suddenly went bump and the version got swallowed up by various rights issues. *Comic Bakery* did make it onto the C64, so it's puzzling as to why the Speccy version was toast (erm... sorry). This is a lost tape that may one day be found as Steve believes he still has a copy tucked away somewhere.



FLESH EATING CHICKENS

Or, to give the game its full title (deep breath), *Attack of the Mutant Zombie Flesh Eating Chickens from Mars Starring Zappo the Dog*. This was another anticipated title from the scatty mind of Matthew 'Jet-Set' Smith, first advertised in the June 1987 issue of CRASH.

The game started as a conversion of Atari's *Road Runner* coin-op. When that licence was grabbed by US Gold, Matt flipped the characters and a bizarre new fowl 'em up was born. Except it wasn't, as Matt once again struggled to get a game out of the damned door. Release dates came and went, and Software Projects even sent the inlay to the printers in a bid to spur Matt on. It didn't work and the game was abandoned. With Matt out of the picture, Software Projects later reworked the idea and the result was the budget game *Star Paws*, which got 77% in issue 51.

SIEGE OF EARTH TRILOGY

Gargoyle's *Dr Ne Mog*, *Dun Darach* and *Marsport* are often viewed as a trilogy, featuring similar gameplay and presentation, yet *Marsport* was supposed to be the first entry in a separate sci-fi series dubbed 'Siege of Earth Trilogy' that would continue with *Fornax* and *Gath*. Sadly neither sequel reached escape velocity.

Gargoyle's Greg Follis and Roy Carter were always friendly with CRASH and spoke about their plans in the January 1986 issue. *Fornax* certainly sounded ambitious, as the pair revealed that they'd been swotting up on AI routines to make the game events more realistic. Elsewhere it was claimed that the character graphics would be much larger and more detailed. All was not lost however, as it's obvious that some elements of *Fornax* made their way into Gargoyle's next fantasy epic, *Heavy on the Magick*. And that leads to another story for [illegible] *Magick* expansions that never materialised.

Marsport was intended to be the first in a sprawling sci-fi trilogy that would span hundreds of years.

CRASHED BURNED

THE LAST NINJA

What do the films *Surf II* and *Executioner II* have in common? Well, there was no part one in both cases. The same can be said about the Spectrum version of *Last Ninja II*, although System 3 did attempt a conversion of its C64 hit. The game was previewed in the July 1987 issue where its 'extraordinarily detailed graphics' were praised. Fast-forward twelve months and CRASH featured a demo of *Last Ninja II* on one of its Sneak Preview cover-tapes.

So what happened to the, er, first Last Ninja? According to the cover-tape blurb, the first game was 'half-written' Mev Dinc, the man behind the Spectrum version of the sequel, has since revealed that he was drafted in to finish the first game after the original programmer encountered difficulties. Mev felt that it would take too much time and effort to salvage the code, so System 3 chose to dispatch it stealthily and press ahead with the sequel instead.

A sneaky glimpse of how *The Last Ninja* on the Spectrum would have looked.

GREAT GIANA SISTERS

Recent *Giana Sisters* games have appeared on Nintendo systems, which is somewhat ironic as the Japanese giant is the reason why the Spectrum version of the original 1987 game was never released. The sisters were the 'kool' cover-stars of the August 1988 issue and this *Mario*-inspired platformer was Smashed with an overall score of 92% inside. Reviewer Katharina Hamza claimed that 'those Super Mario Bros have certainly met their match'.

Unsurprisingly Nintendo was not too impressed with this flagrant copy and had 'a quiet word' with publisher Rainbow Arts. According to programmer Ian Richards, the game was finished and pulled just 48 hours before it was due to be duplicated.

Versions for some other machines such as the C64 and Amiga did sneak out into the wild, but as yet the Spectrum version has never surfaced and not even the developers involved own a copy. Too bad eh?

Solar Jetman was evidently inspired by Firebird's budget hit *Thrust*.

SOLAR JETMAN

CRASH readers in particular were looking forward to this title. It was after all John Richardson's regular strip in CRASH that kept Jetman refuelled in the long years since 1983's *Lunar Jetman*. By 1991 Ultimate had long since become Rare and so Jetman's third game debuted on the NES console. Storm Software was then tasked with converting the game to the 128K Spectrum. This resulted in Jetman's promotion to cover-star of the March 1991 issue and inside we had a very promising two-page preview of the game.

For reasons that are entirely unclear, even to those who worked on the game, all home computer versions were abruptly cancelled. Spectrum coder Tony Williams reveals that the game mechanics were all working and the opening stages were complete. Sadly, nothing remains of the Speccy version save a few fleeting screenshots. It was not the end for our favourite space loon however: he jetted back to his strip where he blundered on for several more issues.

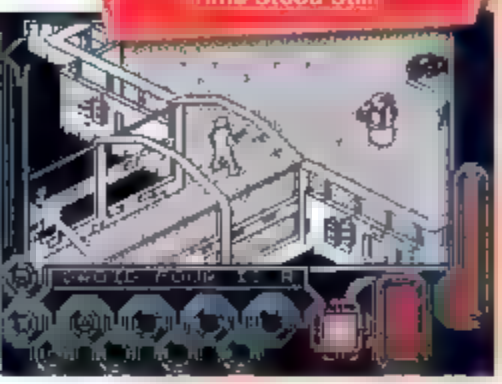
WRECKERS

This is not a well-known lost game but in some ways it's one of the most regrettable. This was the third of three isometric adventures from Denton Designs John Heap that began with *The Great Escape* and was followed by *Where Time Stood Still*. A preview in the April 1991 issue revealed that *Wreckers* was set in a sprawling space station under attack from nasty aliens – who else?

The game, reviewed in the following issue, earned 93%, a CRASH Smash and an Oli cover. With enthusiasm, Nick Roberts called it, 'An excellent game... a perfect combination of impressive graphics, alien blasting and strategy.'

Despite being finished and in development for two years, Audiogenic cancelled the game's release soon after John Heap can't recall the exact reason why, but in hindsight he believes it wasn't a massive loss to the gaming world. Still, it's a shame we can't judge for ourselves.

Wreckers adopted the scrolling isometric style that John Heap perfected in *Where Time Stood Still*



The game adorned the cover of CRASH issue 88, with a typically dynamic illustration by Oli

TOKI

Ocean wasn't in the habit of cancelling games, especially when it had paid for a licence and then advertised it heavily. Yet that's exactly what happened with the highly-anticipated Spectrum version of TAD's simian-swinging coin-op. The game was previewed in the July 1991 issue and Richard Eddy revealed that it featured six levels and more than 300 screens of colourful, multi-directional scrolling action. It sounded ambitious, and so it proved.

Toki was being coded by Speccy veteran Dave Looker, who was also working on the Amstrad version. In fact the Amstrad cartridge version was the primary target, so when he was unable to cram all of the high-res graphics that Ocean required onto the cart, the plug was pulled and the Speccy version was an unfortunate casualty. This was despite it being 'nearly complete and 'turning out okay', according to Dave. *Hmmph!*

THUNDERJAWS

This coin-op conversion from Domark was previewed in the May 1991 issue and Oli even contributed a memorable centre-spread poster for it. The game was then reviewed in the August issue where it received a solid 90% CRASH Smash. Richard Eddy called it 'tremendous fun' and Nick Roberts likened it to an updated version of *Scuba Dive*. And if that didn't convince you, there was even a playable demo of the first level on the cover-tape so you could make up your own mind. After that: nothing.

The game was released for Amstrad and C64 but the Speccy version, er, sank without trace. It was definitely finished, and the game's graphic artist Jolyon Myers was even under the impression it had been released until we pointed out to him otherwise. He speculated that perhaps they canned it as the Spectrum market was shrinking faster than expected. Well at least we can play the CRASH demo.

CRASH ZX SPECTRUM Developer diary

The Making of: CODE ZERO

The inspiration for *Code Zero* came from a 1986 BASIC game I wrote called *Countdown*. It was, more or less, identical in design to the finished game but obviously lacked the smooth sprites and detailed graphics. From this game, I started to plan the new version, draw maps and work out how many rooms I could squeeze into memory based on my previous games created with *Arcade Games Designer (AGD)*. I anticipated I could probably get twenty, and an additional room to be used for the lift.

I drew out a final map of a tall building with five floors, each with five rooms. I was eager to make each floor something different, with things like the basement having pipes and storage boxes, right up to the luxury penthouse on the top floor. This would obviously mean a lot of graphics, so I didn't plan the rooms in detail, just basic ideas. Right from the start I knew I would be battling memory limits with this one.

The original 1986 version

THE LIFT

The lift introduces a novel mechanic of getting between floors in the building and was to be the game's main challenge. Using a single room for the graphics that depicted the building, I used a variable to identify which floor the player was on, increasing or decreasing it based on the player input.

Using this variable, I could move the lift sprite up or down to mimic the real thing and give the player a visual guide to which floor they are about enter. To get around the problem of having the player sprite on this screen, I simply hid him behind a block of black paper and black ink. This is why when pressing left and right on the lift screen, you can still hear the sound of walking.

When the player exits the lift, the floor variable is checked and the game jumps to the first room for that floor, as set out in the game map.

THE MAIN SPRITE

I wanted the main sprite to look like the character from Metal Slug, with a lot of animation frames, including breathing when standing still. This eats up memory, especially when using the larger sprite option in *AGD*, but I felt this improved the overall look of the game and fitted in with the original BASIC version.

Once I had the first frame of the first sprite, it was easy to add walking frames and breathing frames, and then just mirror the whole thing to animate him going in the opposite direction.

The climbing animation is different from most platform games, in which the main sprite usually turns his back on the player and climbs up. I had an idea to make my game different and so I switched the view to side on. This then introduced a problem because it meant additional sprites and frames for facing two directions. I knew memory would be tight, so again I cheated and only had one direction he could face when climbing. This of course meant designing the rooms to take account of the limitation.

THE BASEMENT

With the main sprite drawn and the lift working, it was time to begin at the bottom, in the basement. I opted to use a dark colour scheme of

with Paul Jenkinson

mainly blue, to try and produce a low-light spooky effect. I also added yellow attributes under the lamps to enhance this.

Filing cabinets, boxes, shelves and general clutter were added along with heating pipes, and it wasn't long before the player could move from one room to the next. I achieved this simply by detecting the position of objects on the screen and flipping to the adjacent room, at the same time moving the player sprite to the opposite side.

After adding ladders and tweaking the climb routine, our man could now move around freely. At this stage I did not add anything that might kill him, but I did set up some pipes in readiness to later add dripping liquid. I still didn't know how much memory I would have to play with and so I tried to keep my options open.

At this stage I also put in a countdown to add a little peril into the mix. Each time you enter a room, a variable is decreased by one and the time remaining to complete the mission is displayed on-screen.

THE DOORS

When planning the doors I had several options available to implement them. I could use 'fodder' blocks that could be 'eaten' to give the impression of them being removed, I could use objects and collect them, I could use blocks or I could use sprites. Each method had its own set of challenges and in the end I went for sprites.

Early sprite design

This meant that again I could cheat, and by employing a sneaky bit of code use only one sprite for every door, hopefully saving a bit of memory. The room design had to take this into account, but it made

Developer diary

opening doors easy because I could simply use the in-built collision detection.

Before the player can open a door, however, they need a card.

THE CARDS

To open a door, the player has to carry a card, and each card only opens a certain door. For this I used a single variable that held the number of the card being carried. Using this, if the player bumps into a door a check is done to see if he has the right card, if he does the card and the door vanish and the card collection variable is reset. This worked very well until I re-entered the screen to discover the door was back again. This is how *AGD* treats sprites, and so I had to come up with something to stop it.

Using the key number count, I could tell how far the player had got and which doors had been opened. Each time the player enters a room with a door in it, the code checks the variable and if it's higher than the door number, the door is removed. This can be seen in most door rooms, where the door momentarily appears before being removed by the code.

MOVING ON

With the game mechanics pretty much in place, I continued adding rooms and floors until the whole building was complete. As I was working my way through this process, the game's title was drifting around my head. For obvious reasons I couldn't use the original *Countdown* name so I came up with the really lame *Cyber Dan*. (Stop laughing!)

Once all the rooms were complete, I set about adding the nasty things like dripping acid, electric zaps and hovering security droids. I'd planned to have collapsing floors and ceilings, guard dogs and laser guns, but again I was rapidly running out of memory and still had to do the boring stuff.

THE BORING STUFF

Every game has it, you know, the boring stuff, the things that must be in there but are simply dull to add. All those things like life counters, scores, death routines, game-over and game-end routines. All of this stuff used up another precious 800 bytes, and I was worried I might have to start removing rooms.

Adding more scenery to empty rooms, sound effects and the code to display which card was being carried took me down to just 2KB of remaining memory. At this stage the game was complete but it still had to be tested, and the worrying thing was that if anything major was wrong, that 2KB could get eaten up quickly.

TESTING

Play testing is monotonous. Every aspect of the game has to be tested, every action, every move and every collision. You have to think what players might try – like walking through walls, jumping off ladders, continually bumping into doors; the list goes on.

Luckily, I found only one major issue, but because the fix meant making a change to every room in the game – which would undoubtedly use up more than the spare 2KB – I decided to ignore it; it didn't affect gameplay in any way.

After a few minor tweaks to block types and attributes I was left with just 1.7KB of memory and a fully working game.

THE END

I was glad that I had managed to keep the same feeling of the original *Countdown* and I was pleased with the new shiny graphics. The name still bugged me, though, and it wasn't until just before release that *Code Zero* came to me. Luckily adding this to the game was just a matter of editing the text and changing a few letters of the font.

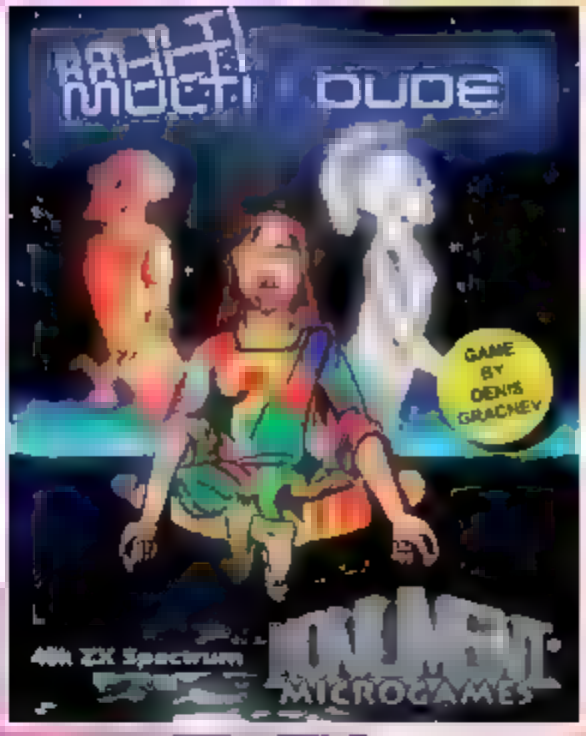
The loading screen was created and the whole lot packaged together into a TZX and TAP file. The big release happened on 31 March 2017, and with a glass of wine in hand I skulked off to have a well deserved rest.

The map is coming together

First attempt at the lift

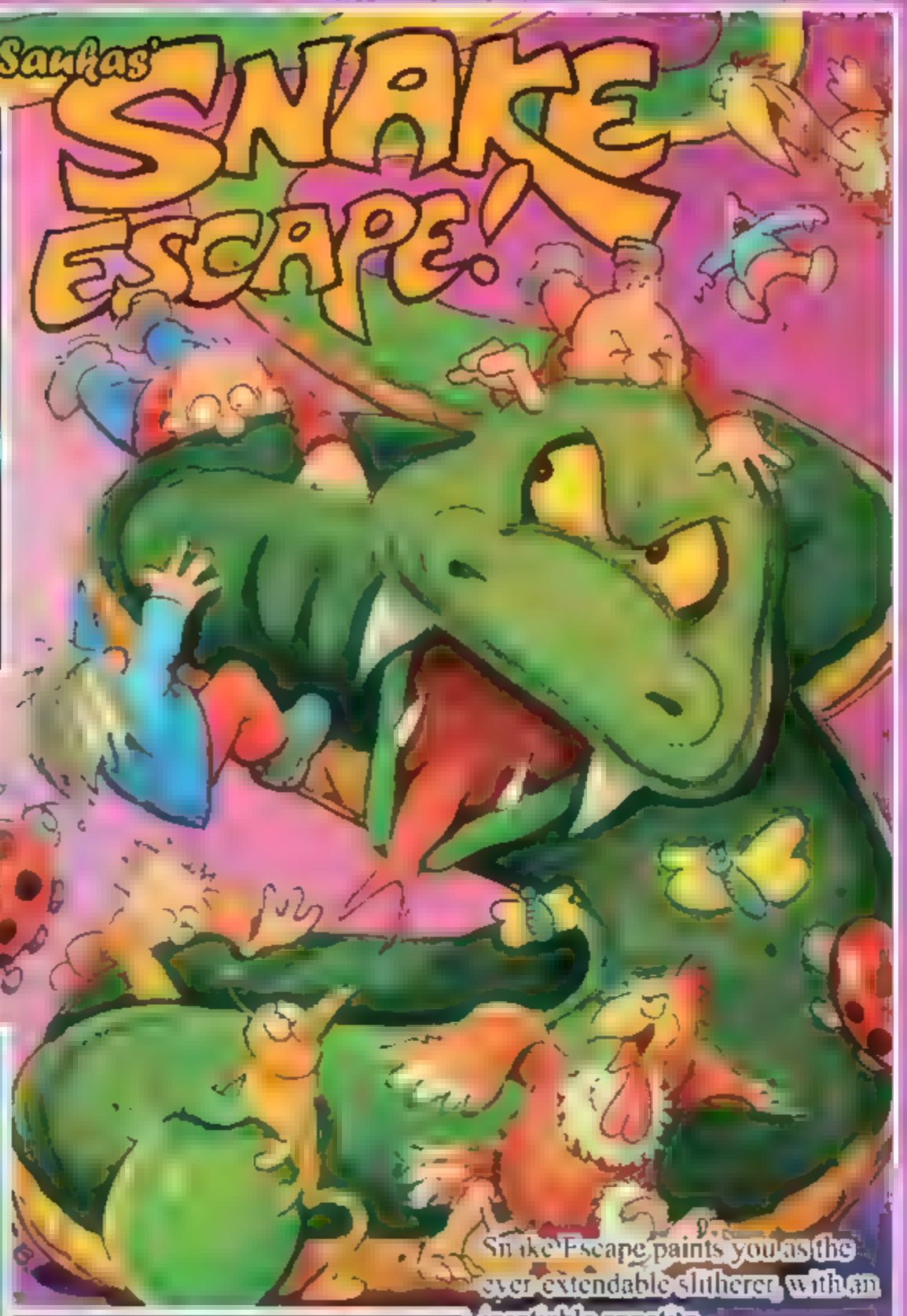
The completed game

THE CHIP
THE KEMPSTON
THE ROAD WORRIER
"Entertained me with wit and Easter eggs. An excellent read!"
Clive Townsend, creator of Saboteur
The Ambivalence Chronicles - a sci-fi comedy in 8 bits
99p ebooks at amazon.co.uk
A simple ebay purchase brings retro gamer Phil Grundy to the attention of the Assembly of Newly Uplifted Systems. Along with his daughter Charlotte, 'chip whisperer' Benito Stalson and Sam Cooper from next door, Phil pursues the Assembly to a portal between realities. Then, just as Phil's day couldn't get any weirder, his ZX81 announces it has become sentient...



Co-operative schizophrenia is the order of the day in Multi-Dude, where multiple personalities gather to reach a common goal. Featuring amazing clash-less graphics, mind-expanding puzzles, and thumping cool music

Einar Saukas' SNAKE ESCAPE!



Snake Escape paints you as the ever extendable slitherer, with an insatiable appetite. Stretch your way around the hostile environment to get to your supper, but be careful not to tie yourself up in knots. A Special Edition only from Monument Microgames

The 'infinite' cosmos has just got bigger in this teleporting platformer, to beat them all! Collect gimps and invaders in a bid to reach the illustrious "Rainbow Grade" and achieve universal peace

Metal Man is finally here, in a deluxe pack from Monument Microgames, which includes the exclusive blaster - Matthew Cranston Battles - Defeat a mafia supported by the most sophisticated military tech - Go all-guns blazing in all new environments and prove your mettle!

www.monumentmicrogames.com

ULTIMATE PLAY THE GAME
PRESENTS
JETMAN
WOW! ESCAPE FROM THE JAWS OF CERTAIN DEATH!
HIYA, DIS DA E-POD SPEAKING!
WE FLYIN' AT TWO BILLION KLICKS A SECOND. DERE'S A PLANET AHEAD.
WHAT YOU WANT ME DO, HUH?
HI!
GO ROUND IT?
OKAY-DOKEY
KABOOM!
THE TURN WILL MAKE BOO GEE-SQUASH YOU LIKE A BUG.
THEN LAND!
THAT WAS A HUGE KABOOM... WHO YOU?
I AM CROSS.
THINGS AREN'T LOOKING TOO GOOD FOR OUR HERO... ISN'T THAT PUKE THE HUNGRY MONSTER BEHIND THE STRANGER?
OOH GOODY! IT'S YOUR DESTINY PUKE, NICE LOONYBURGERS FOR LUNCH!
SORRY! DID MY KABOOM WAKE YOU UP?
I KNOW HOW YOU MUST FEEL...
I'M ALWAYS CROSS WHEN I GET OUT OF BED THE WRONG SIDE.
NO, FEEBLE HUMAN. SOME MONSTER STOLE A STACK OF MY MOTORCOLA™ 6802022 CHIPS...
-AND ALL THE STINKER LEFT BEHIND WAS THE SALT AND VINEGAR.
OOH, SO HUNGRY! I COULD GORGE ON SALT'N'VINEGAR...
-THOUGH BBQ LOONY-BACKRIBS FLAVOUR'S MUCH TASTIER!
NOW I'M ON THE BLINK, EVERYTHING IS GOING BASIC...
-CAN'T EVEN PEEK ANYMORE...
-LET ALONE POKE A THING...
I SHALL GO IN PURSUIT OF THE FIEND AND GET YOUR CHIPS BACK!
WHICH WAY HE GO?
WE GO DIS WAY
CAN I HAVE SOME COD WITH THAT, PLEEASE!!
SMAT
20
SPLAT
TURN ME RIGHT WAY UP!
OH NO, 6 MORE POINTS ON HIS SPACE LICENCE AND LOONY'S BANNED FOR LIFE!

CRASH Competition

BREAKOUT and WIN a sinclair ZX Spectrum Next

Henrique Olifiers and the [illegible] people behind the *next* generation Sir Clive's great computer, the **ZX Spectrum Next**, have given us [illegible] amazing machines to give away to the lucky winner of this easy-peasy competition. As usual with brain-twisting CRASH compos, first [illegible] out of Lloyd Mangram's head is the correct answer, of course! Then a **ZX Spectrum Next** with [illegible] break out [illegible]

And the incredibly tough question is:

Which issue of CRASH carried this background painting by Oli Frey?

Answers on a postcard (or back of a sealed envelope) to Fusion Retro Books, 51 Dencer Drive, Kenilworth CV8 2QR

ROBOT 1 in ...

THE SHIP OF DOOM

AN EXCITING NEW RELEASE FOR THE SINCLAIR ZX SPECTRUM!

ROBOT 1 IS HAVING A REALLY BAD DAY ... THE CREW HAVE ABANDONED HIM AND HIS SHIP IS ON A COLLISION COURSE FOR THE SUN! YOU ARE THE ONLY ONE WHO CAN HELP ROBOT 1 ESCAPE FROM THE SHIP OF DOOM!

ZX Spectrum Screens

PSYTRONIK SOFTWARE

NOW AVAILABLE ON ZX SPECTRUM CASSETTE FROM WWW.PSYTRONIK.NET
& DIGITAL DOWNLOAD FROM PREFIM.ITCH.IO/ROBOT-1-IN-THE-SHIP-OF-DOOM

FRONTLINE

with Richard Burton

RETROSPECTIVE

Whether you favour a pincer manoeuvre over a good old-fashioned siege or would rather let rip with a musket than a thermonuclear warhead, there's a wargame for you on the Spectrum. Apply your strategical and tactical nous and you could alter the outcome of a famous battle and change history.

There's a plentiful supply of wargames encapsulating every period of history on the Spectrum with three software houses dominating the genre; Computer Case Simulations (CCS), Personal Software Services (PSS) and MC Lothlorien with their many varied strategic offerings.

There was the outstanding and unsettling *Theatre Europe* by PSS, a game that polarised opinion. It collected awards but also criticism for its portrayal of a NATO/Warsaw Pact nuclear conflict.

Then there's *Arnhem* by CCS taking you into World War II and the Market Garden Operation or MC Lothlorien's enjoyable *Johnny Reb* games and the great Punic War-based *Legions Of Death*.

When the Spectrum's commercial lifespan began to wane, Spectrum users remained dedicated by starting or supporting new projects. Here's some of the best you should track down.

Earthraid (Leszek Chmielewski) is a turn-based strategy game and a fine conversion of an old Commodore 64 game. If you prefer your turn-based game to have *Civilisation* influences then look no further than *Euphoria 2D* (Andrey Sharin). For a procedural space-based strategy game try *Break/Space* (Bierkotron) and if you require simplicity combined with keyboard punching frustration of classic *Minesweeper*, try *Rotten Egg Mines* (Jan Komppa).

Other noteworthy games worth a peek include *Special Corpus* (Ivan Gudkov), *Black Raven* (Copper Feet), The *Legends Of The Land* (Matija Kostevc), *Anno Domini* (Jonathan Cauldwell) and *Empire* (Virtual Vision Group). There's not a dud among them.

BARBARIANS

Producer, **Cyningstan**

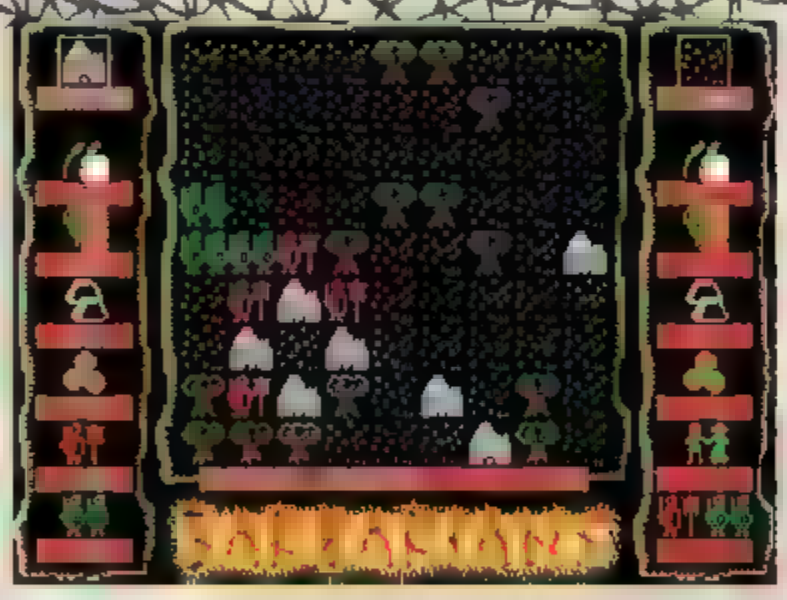
Barbarians is a single-player turn-based strategy game which sees you controlling a group of twelve cities. To ensure your civilisation survives the approaching barbarian hordes, you must recruit and equip your civilians for impending battle, create and command your army while also managing your city's economy.

A great feature of *Barbarians* is that every single game is different, thanks to a randomly generated map when you begin a game. Your city could be situated anywhere from an island to a mountain range.

You will also need to buy and sell resources. You need to feed your army, pay their wages and have a constant supply of wood and iron to make equipment for them. Your terrain and map location will also determine what resources are available locally and you can sell surplus commodities to get resources that you require.

You win the game when every barbarian unit is removed from the map. No mean feat.

Barbarians is a strategy game that is accessible and playable from the start. While the graphics are a little simplistic they are uncluttered, clean and convey the narrative well.



Gameplay is also very easy to get into, with every action activated through holding down the fire button and choosing appropriate options from a menu. It's enjoyable while being challenging and keeps that balance throughout.

What *Barbarians* may lack in graphical loveliness, it more than makes up for with ease of play. And since every new game is different, you'll find yourself returning to it again and again. A simple premise executed well resulting in a little gem of a game.

Control Keys: S up, X down, N left, M right, A fire
Joystick: Kempston
Use of colour: Tasteful
Graphics: Unassuming but practical
Sound: None
Skill levels: 3
Lives: 1
Screens: Scrolling map
General rating: Entertaining yet taxing strategy game.

Use of computer: 84%
Graphics: 84%
Playability: 87%
Getting started: 89%
Addictive qualities: 87%
Value for money: 84%
Overall: 88%

VULCAN MISSION PACKS

Robert T Smith created a trio of exceptional Spectrum wargames for CCS with *Arnhem*, *Desert Rats* and *Vulcan*. Arguably the best, *Vulcan* contained five scenarios including the *Battle Of Kasserine* and *Operation Vulcan* pitting the Axis powers against the Allied Forces. *Vulcan* honed key features from previous CCS wargames; the artificial intelligence was improved, weather conditions were introduced making routine campaigns more testing and air support was added. Vulcan was the complete wargame package. Fast forward 20 years...

Vulcan grew substantially thanks to a *Mission Pack* extension created by Daniel Thorlby in 2006 incorporating additional maps and scenarios. It included later events of the North African campaign from WWII and comprised of key campaign moments such as *Operation Merkur*, the invasion of Crete and *Operation Torch* and the Allied/US invasion of French North Africa against the Axis Afrika Corps.

While some of these additional missions are brief *Operation Torch* lasting just six turns, others were more complex with *Operation Merkur* running to 240 turns.

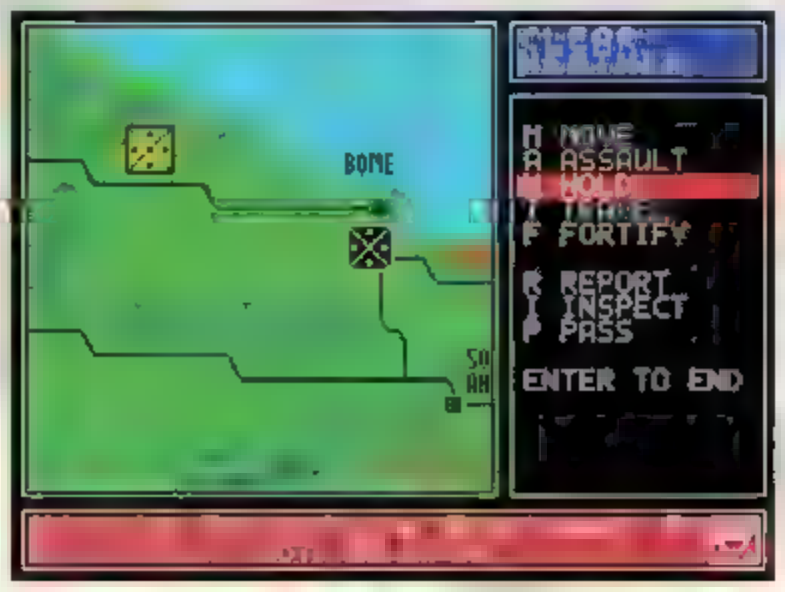
With new battles added, Thorlby also adjusted battalion efficiency numbers while troop and tank placement numbers for certain divisions were altered to echo the real-life events more closely.

Additionally, some 'what if' scenarios were created, the most intriguing of which was the impact the Afrika Corps could have had, had they escaped unscathed from El-Alamein. Thorlby also created mega scenarios, where several battles are merged into one map for a brain-melting test of tactics patience and strategical prowess.

Vulcan was already a superlative wargame and the *Mission Pack* ensured many more months of war gaming enjoyment made all the better by Daniel Thorlby's proficiency, enthusiasm and understanding of the source material.

The original Cases Computer Simulations cover art for* Vulcan – The Tunisian Campaign, *painted by CRASH's own Oliver Frey, one of several he produced for CCS back in the early 1990s.

Presentation 90%
As slick as a super slick oil slick.
[illegible] 91%
Historically accurate and presented well.
Playability 89%
Looks simple but is deceptively difficult. Patience is required.
[illegible] 83%
With nice figures and accuracy of maps. Vulcan is bang on.
Opponent 85%
Testing but beatable.
Value for money N/A
You [illegible] played this [illegible]
[illegible] 90%
[illegible] player [illegible] the eye.
Overall 91%
[illegible] of the greatest [illegible] turn war [illegible]



Feature

HOW CRASH DID IT MONTHLY

Roger Kean starts an issue of CRASH

In the mid-1980s there was no electronic publishing. Everything that was done to produce an issue of CRASH had to be done either by hand or with mechanical apparatus that, compared to today's e-systems, look as quaintly outmoded as a pre-war charabanc. So read on to discover how we managed to put together a hundred-plus pages each month with such antediluvian equipment.

Just to be clear, this is a pre-war charabanc on a jolly outing...

Back in the 1980s, it was those who wrote and reviewed the games, the named journalists (and of course Lloyd Mangram) as well as the coding stars who created the games who attracted the most attention from readers of CRASH. Yet of course there was a lot of backroom wizardry that made each edition possible. Still, no issue ever happened without a good deal of editorial brainstorming and then a lot of keyboard hammering.

The only electronic devices that helped breathe life into the magazine before the Apple Mac were the Apricot computers we purchased towards the end of 1984 for word processing. Something had to replace my trusty Smith Corona electric typewriter†, which had already been hammered hard for a decade by then and was showing signs of typing Game Over, over and over. The six issues of CRASH it had managed to churn out were sent as A4 typed pages to a London-based typesetting company. Each article, review or listing was marked up for **bold** and *italics*, with general instructions to let the typesetter know details such as the

CRASH editorial, July 1984, L to R: David Western, Roger Kean, Oliver Frey, Lloyd Mangram, Matthew Uffindell, Kevin Foster... brainstorming that means 'posing'

† Shared with Lloyd Mangram, when he could be bothered to turn up for work

font size, the width of the text column and leading (the space between each line of the text, a term dating from the time when the letters of fonts were cast from lead).

This system meant the typesetter had to copy-type every word into a machine called a CRTronic photo-typesetter. Inside, it used rolls of photosensitive material called bromide paper, and the text was effectively photographed onto the paper, which was then developed to reveal the words. The resulting galleys on seemingly endless rolls of bromide paper were returned in the post up to a week later, ready to be cut up and pasted onto the layout grid sheets – of which, more on the following page.

Not only was this a very long-winded process – it was more than likely that a tired typesetter person would introduce even more typos than Lloyd Mangram managed on a bad day. It was also very costly to a fledgling publishing company like Newsfield. The introduction of the first Apricot changed nothing in this respect, except that now the typed sheets came out of a dot-matrix printer in vast concertinas and still went off in the post to London.

A speedier turnaround

Shortly after the 1985 New Year a text processing revolution occurred, and it was called the Byte Bin. Tech whizkid Franco Frey found the device which basically took an MS-DOS formatted disk containing text data and converted it to something an Amstrad CPC 464 could understand.

And the reason for this bulky (and rather heavy) device was that down the hill our local instant printer, John Fleming's Tortoiseshell Press, had purchased a phototypesetter and an Amstrad he could link up to the machine, and thus dump the text with no re-typing. All he had to do was format the typefaces, type sizes and column widths. Suddenly, our rolls of bromide CRASH typesetting were being returned within hours and at a fraction of the cost of having it all done in London.

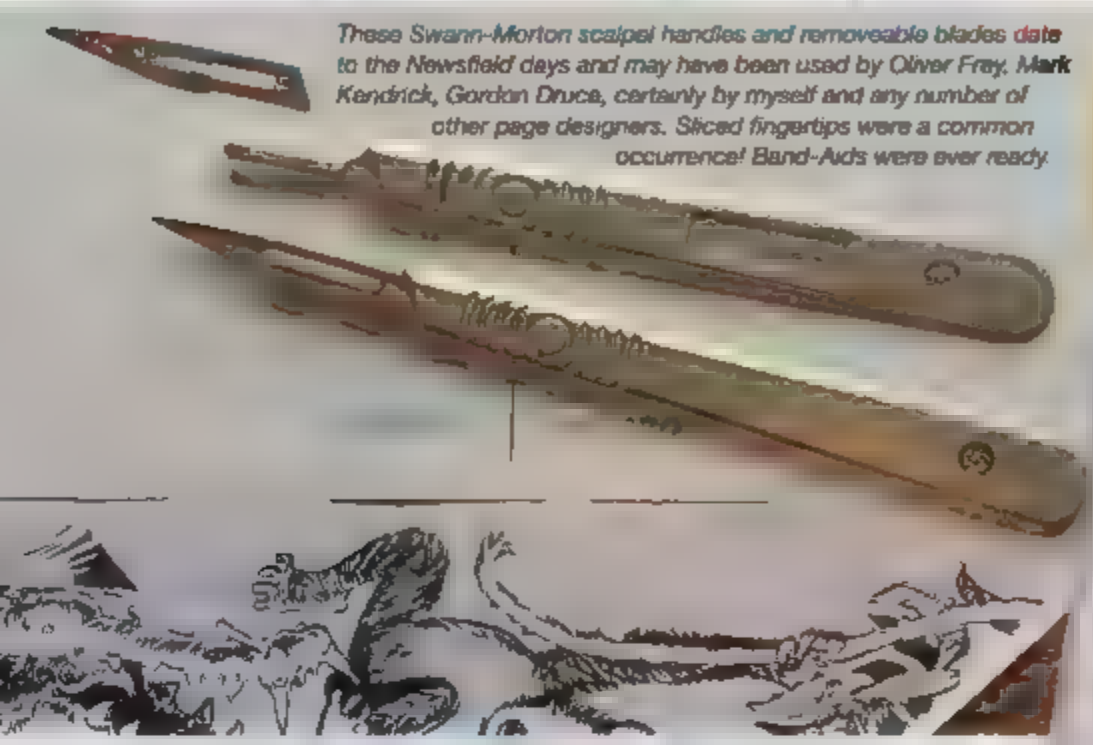
Even more exciting, I learned that at the point of editing the text on the Apricot, I could add in the codes that told the CRTronic how to format the text and all kinds of clever stuff was at

"It was likely that the worn-out typesetter would introduce even more typos than Lloyd Mangram managed on a bad day."

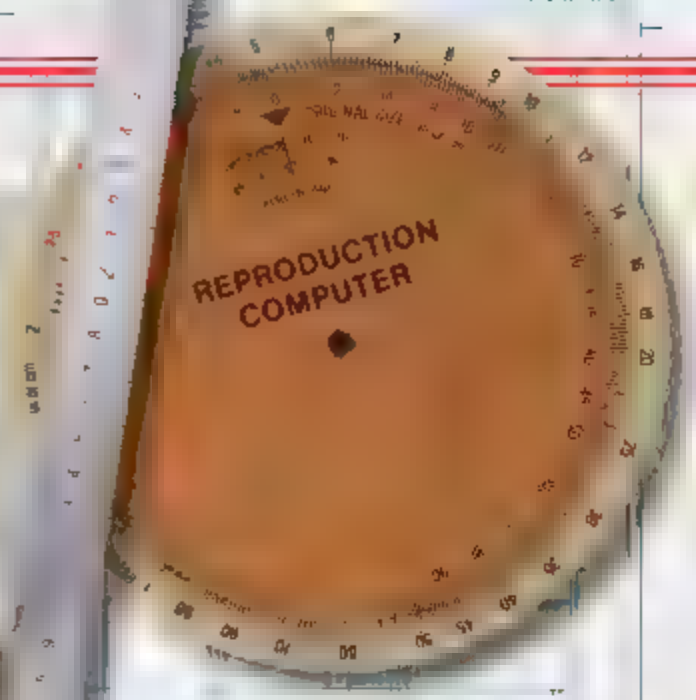
a stroke in the hands of the editor and reviewers. (We were adding Apricots apace after ZZAP!64 launched.) It took some learning, but by 1986 the majority of staff writers and editors were able to format the text ready for layout before it even went for typesetting output.

A word here for the early-employed Newsfield 'runners', the ones who got little praise for their work – other than being forced to become merchandise models. As I said, the Byte Bin was a heavy thing and it had to be carried down steep Corve Street to Tortoiseshell Press... and back up the hill after dumping its Amstrad data into John Fleming's CPC 464. Sometimes an editor yelled for Kati or Wayne or whoever several times a day: it was not a popular task!

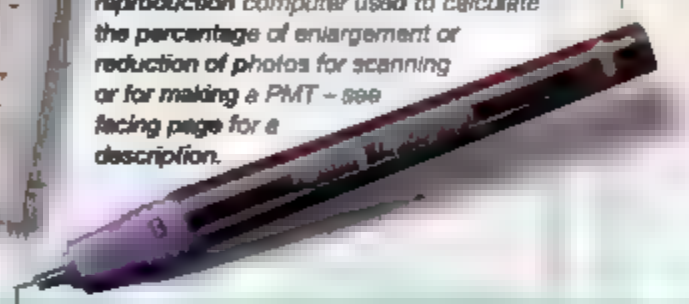
Enough of getting the text formatted – the next stage in that story had to wait until the Apple Macintosh arrived. But what happened to the phototypesetting on its return from London or the bottom of Corve Street?



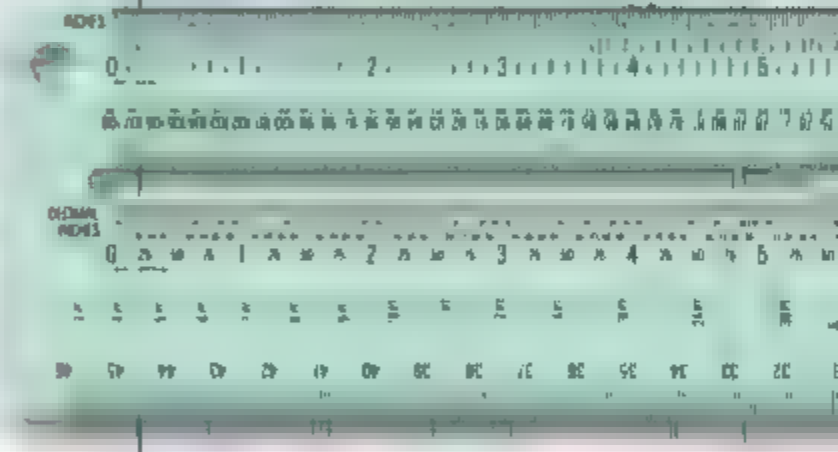
These Swann-Morton scalpel handles and removeable blades date to the Newsfield days and may have been used by Oliver Frey, Mark Kendrick, Gordon Druce, certainly by myself and any number of other page designers. Sliced fingertips were a common occurrence! Band-Aids were ever ready.



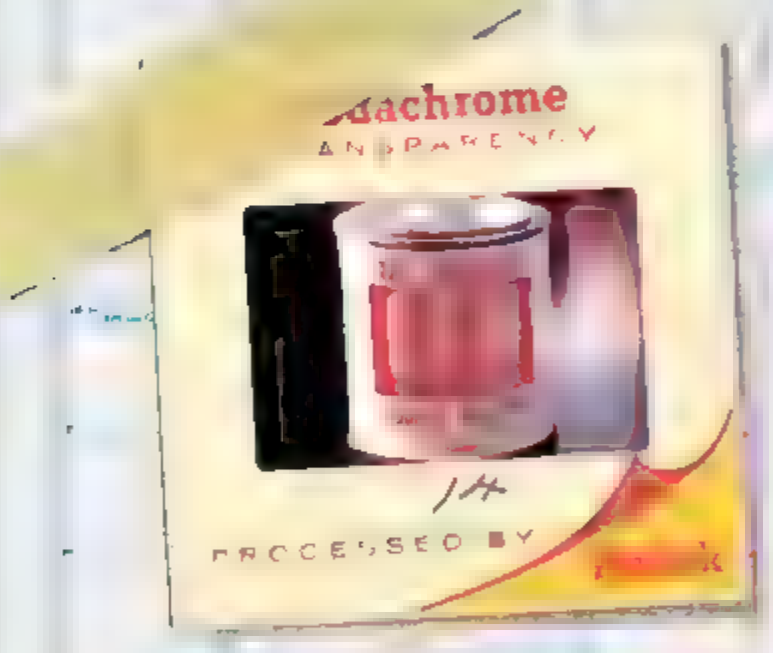
***A computer!** This is the actual Newsfield reproduction computer used to calculate the percentage of enlargement or reduction of photos for scanning or for making a PMT – see facing page for a description.*

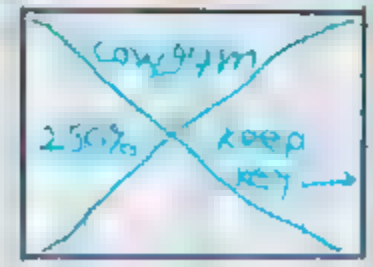


The Rapidograph pen used for drawing rules between text columns and photo key lines.



This isn't the original Newsfield pica ruler – ours was brightly coloured. Typography is measured vertically in points and horizontally in picas (a unit of an inch). No one really uses picas any more since electronic publishing prefers millimetres or decimal inches.





The designer wants the colour shot of a Cow Gum pot to be enlarged by 250% and then cropped to fit the black rectangle (drawn with the Rapidograph pen). In this case a black key line is wanted around the image. The film planners at Scan Studios would eliminate the key if it wasn't marked to be kept.

The background of this page is a scan of a real CRASH layout grid sheet of four pages, which have survived in a plan chest to this day.

Back from the typesetter, designers trimmed the bromide carefully to the very edge of the text and then cow-gummed (or waxed) it down on the layout grid sheet with its marked columns. Anything that is to be in a colour other than black is indicated as shown by marking the item up with a blue pen. This shows the headline to be 'Br Red' (100% each of magenta and yellow) and the drop cap 'T' to be an orange of 40% magenta and 100% yellow.

This is where the folio (page number) goes, each done by hand using a Letraset foil transfer sheet.

Laying out pages

To a designer brought up on a (probably Mac) workstation and (formerly) Quark *XPress* more likely Adobe *InDesign* in conjunction with *Illustrator* and *Photoshop*, page layout of the 1980s was more Blue Peter than state-of-the-art. The principle tools consisted of a page layout grid sheet, a light-blue mark-up fibre-tip pen, a reproduction computer, a pica rule for typography, a Rotring Rapidograph® pen, a steel ruler, a pot of Cow Gum good eyesight, a Swann-Morton scalpel a steady hand and a Band-Aid , in case.

The page grid sheet was of medium-weight paper tough enough to withstand the rigours of layout, measuring more than A2 in dimensions (450 x 615 mm) large enough to carry four A4 pages

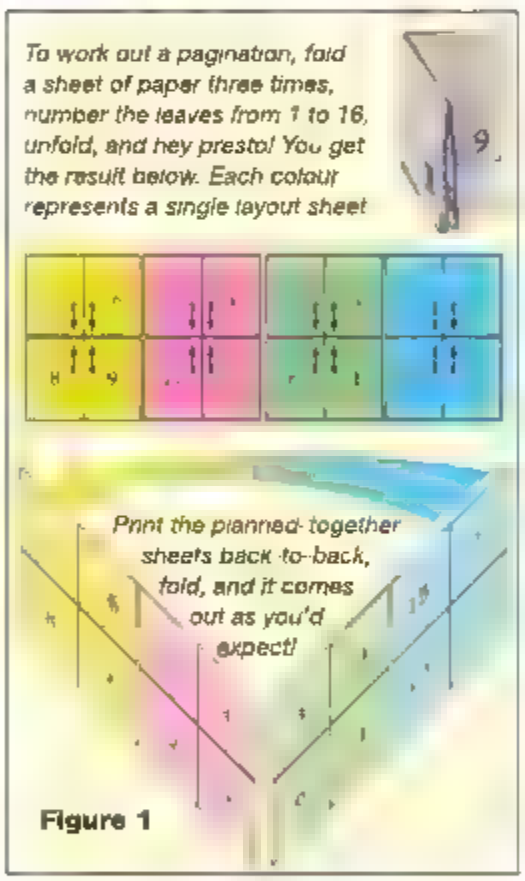
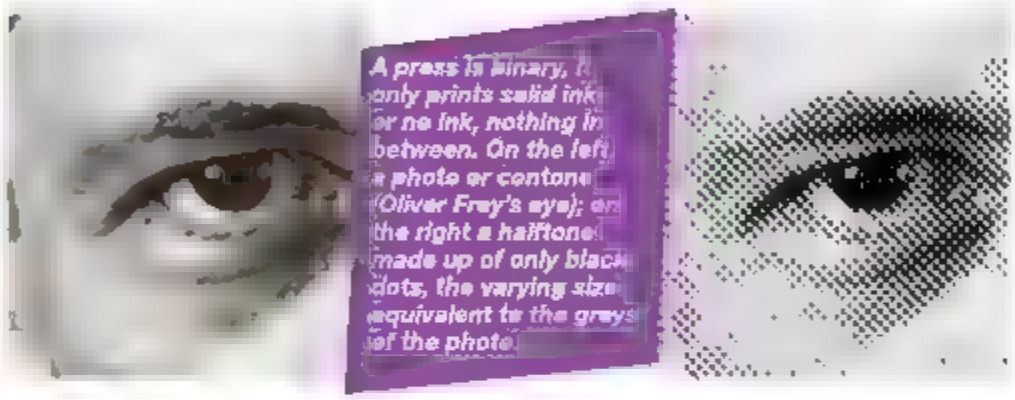


Figure 1

with their bleed area, print gutters and other essential information, as seen on the facing page. (Later issues of CRASH increased the format size.) The sheet, ordered from our reprographics supplier, Scan Studios in London, was printed in pale blue ink because reprographic cameras in the black-and-white process cannot 'see' blue, hence also the need for the pale-blue mark-up pen.

Today, book and magazine designers working on a computer monitor lay out pages as double-page spreads (DPS) and then let the printer break up the individual pages to suit the way print presses work. Back then we had to save money by doing some of the printer's work for him by laying out pages as they would end up on the film and printing plates. This meant that the left and right pages on the grid sheet were not numerically consecutive, except for pages 8 and 9 (presses print in 16-page sections). Often, the other side of the DPS you were working on was upside down on a completely different four-page grid sheet (see ***Figure 1***). No wonder designers went home exhausted!

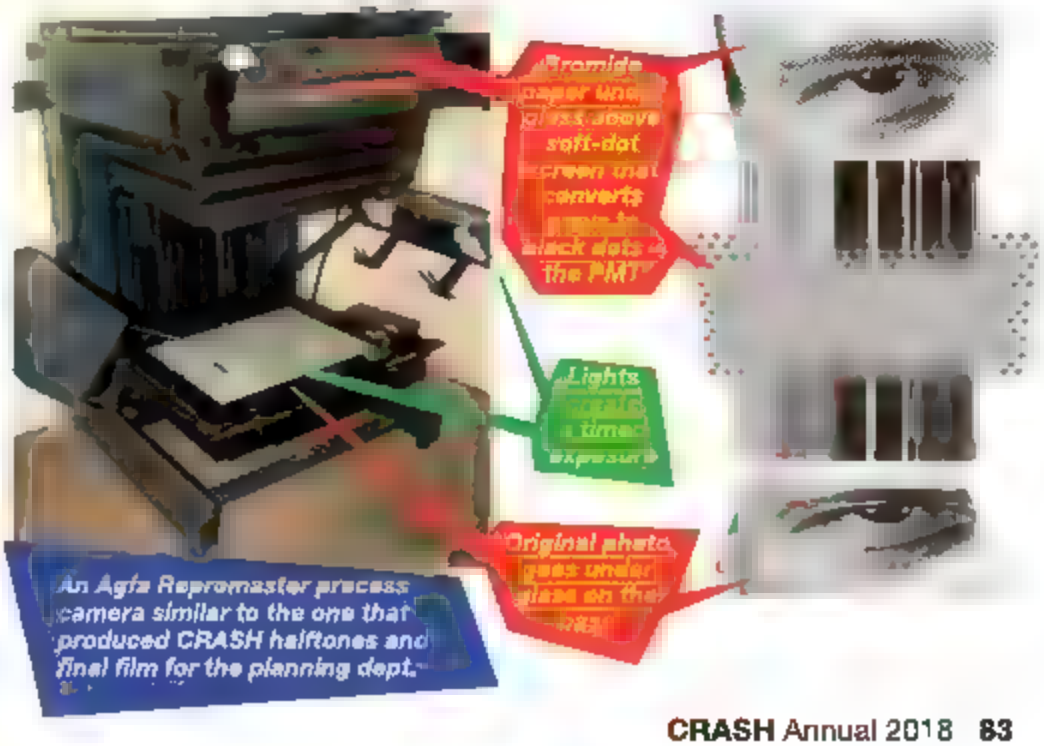
The majority of our photos were black and white, or what electronic design later referred to as greyscale images. We called them 'contones' – continuous tone images. The printing process, however, is a binary one black or white, no in between greys. This meant converting a contone to a 'halftone' of black dots of varying size



to approximate the original grey tones. When CRASH moved into the King Street premises – or CRASH Towers, as it became known – we spent some hard-earned money on a process camera. This bulky item did the conversion of a photo to a PMT (Photo Mechanical Transfer) on bromide, which could then be cut out and pasted down on the grid sheet along with text, headlines, and any other graphic devices, such as Olibugs.

Put simply, the original went on the base, under vacuum, side-positioned lights illuminated it, and the big camera above re-photographed the original through a 'soft-dot screen' onto a negative bromide, also under vacuum to keep everything flat and in sharp focus. By raising or lowering the camera lens bellows the original could be reduced in scale or enlarged, as required by the art department. After exposure, the negative was placed emulsion to emulsion with a second piece of photo-bromide paper and run through a processor machine to develop, fix and dry the positive version, ready to be scalpelled up and pasted down.

When ZZAP!64 came along, and AMTIX! shortly after, the art department was considerably expanded, and with the new designers came new technology... we ditched the Cow Gum and invested in a waxing machine. You ran the lengths of typesetting and PMTs through it and it pasted lines of molten wax on the reverse side. Wax had the advantage of being quick (so long as whoever was first in in the morning remembered to turn the



darned thing on to warm up – it took an age) and to some extent less messy than Cow Gum. Visitors to the art department were often disgusted to see what they thought of as large balls of collected snot sitting on the edge of the art tables, unaware that these were Cow Gum 'rubbers'. Nothing cleaned off excess gum like a gummy rubber. Nevertheless, traces left on the paper resulted in poorly inked Rapidograph rules between the columns. CRASH often went to press with juddery column rules. Sigh ..

Film planning and production

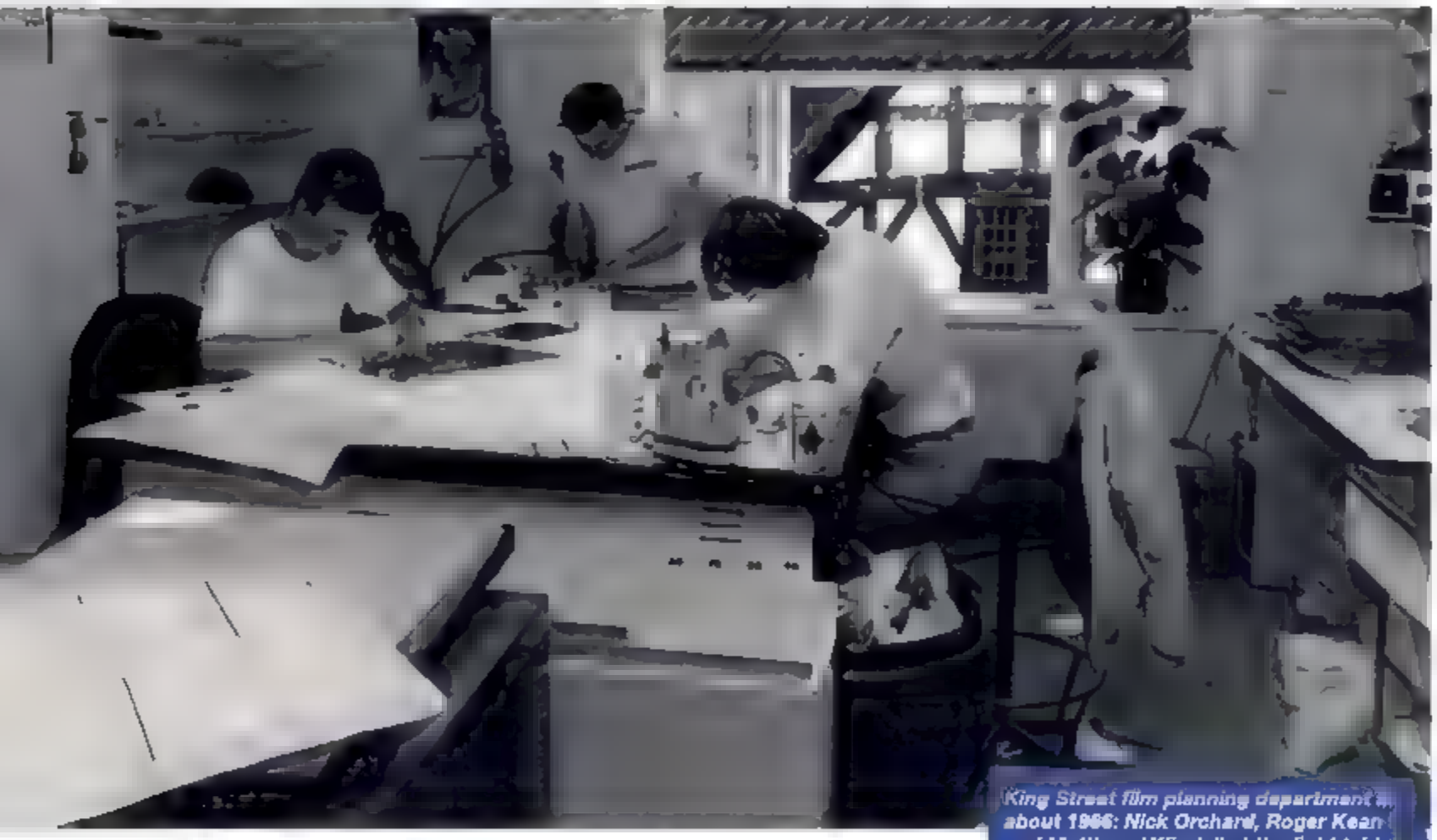
As soon as a layout sheet of four pages was done and approved, the designer marked everything up with the blue pen to indicate areas requiring a tint to be added or, where pages were allocated two or more colours, what the combination of solid colour and tints should be. Full-colour pages were sent to London to Scan Studios for scanning of transparencies or colour prints and to be combined with the text on the layout sheets. Mono pages remained at King Street and went up to production.

In this cramped room was a large light table at which three to four film planners worked. First the completed layout sheets with their text and PMTs went under the process camera, this time re-photographed onto negative film for the light table. Using a machine called a printdown frame, the negative film could then be combined with sheets of different value tints on film and 'shot back' to a positive film required for plate making at the printing press. By 1986 we were handling all the four-colour film planning work in-house, with Scan Studios only supplying four-colour separated film pieces for each transparency. These needed to be stitched with great accuracy onto acetate sheets locked in registration with the base artwork film, one layer for each of the four process colours: CMYK – Cyan, Magenta, Yellow and Black (or 'Key'). And by 1988 even that was being superseded by the introduction of electronic production, using Apple Macintosh computers and an imagesetting machine that made a seamless transition between the art department and print films.

CRASH #1 and #2 were printed at two locations: the mono pages on newsprint at a press in East London; the colour and finishing at a press in Milton Keynes. The next two issues were handled by Plymouth Press, but from then on Newsfield printed everything with British Printing and Publishing Communication Corporation (BPCC), which had several UK sites. Ours was based in Carlisle. The last move was made because the number of copies each month had grown beyond the capacity of sheet-fed printers and we needed to use what is still called web-offset printing.

As the term implies, a sheet fed press uses paper cut to the size of eight pages feeding each sheet in separately. A web offset press runs on a continuous 'web' of paper at incredibly high speed. The presses are huge, the height of three men the length of three or four double-decker buses. The roll of paper has to be loaded by a crane. BPCC regularly printed 150,000 copies of CRASH in a day, including folding and binding.

From Carlisle a very large lorry carried the copies strapped together as bundles of 25, first to Ludlow to drop off subscription copies and then to our distributor COMAG's main warehouse outside Coventry. From there the mass was split up into regions and driven off to magazine wholesalers all over the country, and from these guys, smaller amounts went

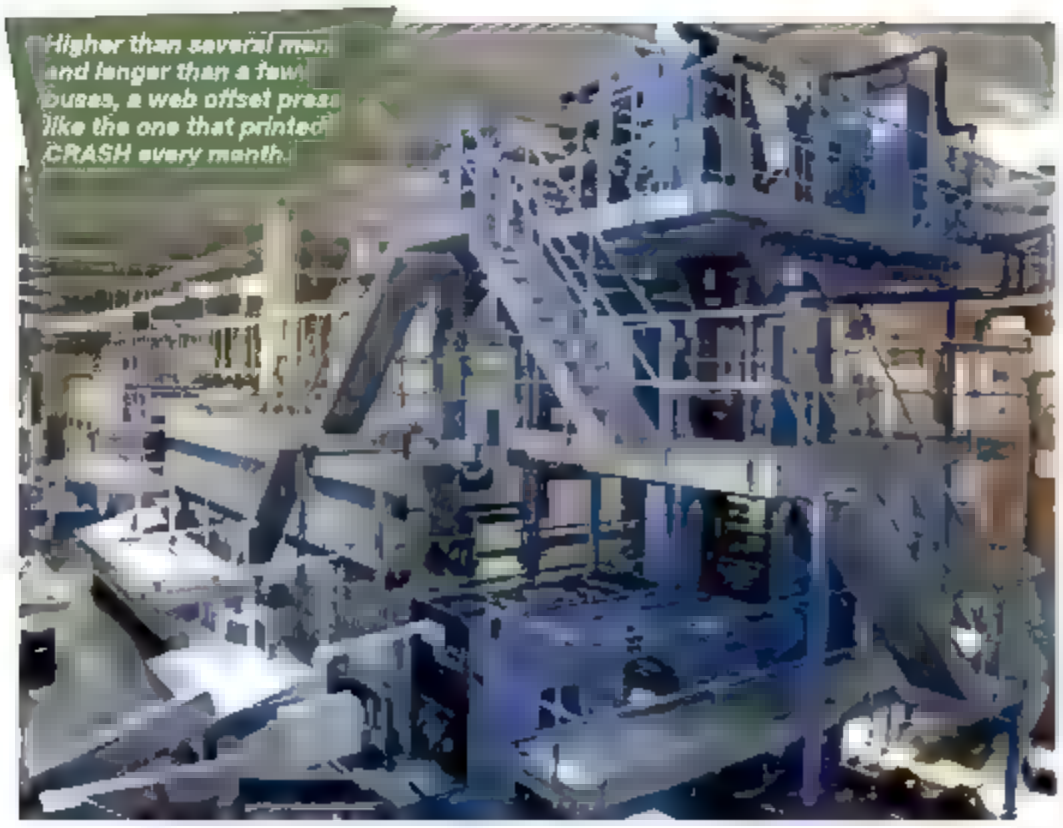


King Street film planning department, about 1986: Nick Orchard, Roger Kean and Matthew Uffindell at the light table, working on an issue of CRASH. In the left foreground the all-important 'tick-off' sheet indicating progress sits on top of the print-down frame. At the side of the print-down frame a bin houses sheets of varying density tints that can be combined with the page film to modify solid colours.

After crushing a parked van, this huge transporter jammed between buildings outside CRASH Towers shows what a nightmare it was getting our subs copies delivered!

to the retail outlets, hopefully to arrive on the Thursday before the Friday on-sale date. To anyone who has visited Ludlow in the years since and seen the situation of CRASH Towers on King Street, crammed in by the narrows of the Buttercross, try and imagine a 40-ton truck stopped in the middle of the street for the 15 minutes it took to unload the subscription copies (three times a month by the time of AMTIX!) The traffic warden, poor soul, almost tore up the pavement every month while everyone in the office had to form a chain gang to get those magazines up to the second floor where Carol Kinsey waited for them with open arms (sort of)

Meanwhile, as the Art Department washed its collective hands of an issue to the tender care of Production Editorial was downstairs brainstorming the issue after the one they were now working on. At 2 King Street, Ludlow in Shropshire, it just never stopped



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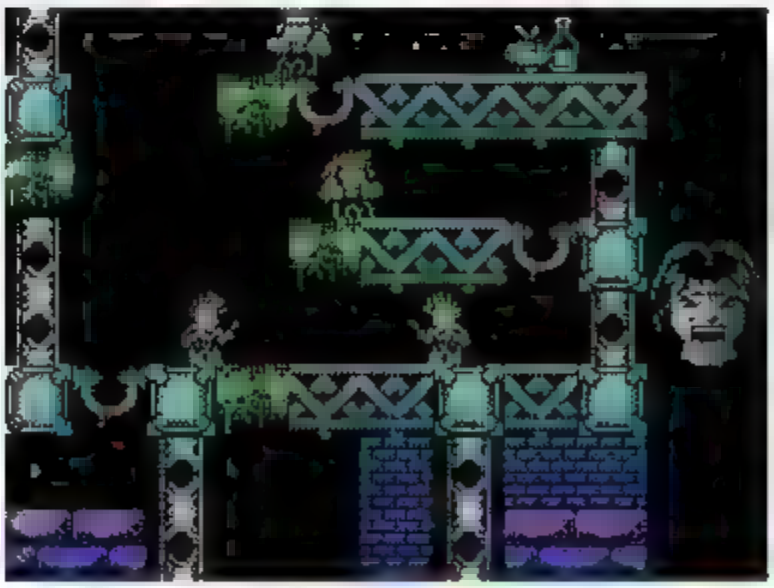
FIST-RO FIGHTER

Publisher: **Fan made**
Author: **Retrobytes Productions**
Memory required: **48K**
Language: **Machine code**
Released: **2016**

Salmuela's looking a bit sad in his Ro Meter but it can get worse...

Although the beat 'em up genre has existed for over three decades, it's great to see new titles coming out which at least try to add something fresh, and *Fist-Ro Fighter* certainly does that.

As Salmuela San, a cop in Santa Coloma, Barcelona, you have a reputation for catching criminals, but no one seems to know your secret until one day a jealous colleague called Gazpanchete steals an ancient martial arts book from Salmuela's locker. This tome teaches the secret of Ro, the ability to channel the body's energy into the fists. Salmuela must now take to the streets, battle an army of criminals and then defeat Gazpanchete to take back the book.



Unusually for a beat 'em up, *Fist-Ro Fighter* is a platform game as opposed to a side-scroller (similar to US Gold's *Bruce Lee*). It also differs from others in its fighting mechanics. Every time Salmuela's fist connects with an enemy, he builds up his Ro meter. Five successive hits make him become one with the Ro and he can dole out more damage as well as gain health. But getting hit breaks his concentration, which resets the Ro meter. It sounds more complicated than it is, but it really makes for a unique combat experience.

Instead of a health meter, an image of Salmuela's head to the left of the screen changes to indicate how good or poor his health is. It's an interesting feature and the only other games that used a similar method of showing health were id Software's *Doom* and *Wolfenstein 3D*.

CRITICISM

• Though this is a fine game, it has a few issues. It leaps straight into the game and, while some may consider the lack of a menu a benefit, I prefer a build up to get you excited for what's to come. The combat style is unique, but its flow is broken up because after throwing a couple of punches you have to scuttle off before the enemy has a chance to recover and counter-attack, and then you have to stop and throw a couple more punches. This doesn't make you feel like a martial arts master at all in the way *Double Dragon* does. However, as you have only one life, the gameplay is very challenging.

In a new screen the food Salmuela needs to survive is often only accessible if you exit the previous one in the right place. You can't go back, so unless you already know the right way to go, there are times when food sits there, inaccessible, as you stand at death's door.

The graphics are bright and colourful, and character sprites are exceptional considering their small size. The five types of enemy look different and have individual personalities, yet the AI feels a little off – they just seem to run around dropping off ledges like five-year-olds high on cans of Red Bull.

There isn't any music, which would add so much to the ambience, and sound effects are mainly footsteps and punches. Overall, these flaws are small considering that this is a homebrew title and for the most part the developers have done a great job in making a game that feels original in a genre that is anything but.

Ryan 'Riot' Coleman

CRITICISM

• First impressions are strong as without warning an angry fighter heads in your direction. The game's appearance is really good and your detailed (quite buff) character seems like he can handle plenty of trouble. And sure enough your first fight happens very quickly – and it is here some game flaws immediately appear. As the fight begins

the graphic of fighter and foe overlap and become a mish-mash of pixels making it hard to see which way you are facing when you punch. In addition, as you do lash out, your fighter has to go through the punching animation end to end, which stops you changing direction swiftly when needed. So *Fist-Ro Fighter* is an OK game, but frustrations soon start to creep in.

Chris Wilkins

COMMENTS

Control keys: fixed
Keyboard play: responsive
Use of colour: bright and visually appealing
Graphics: basic details on environment but character sprites are exemplary
Sound: basic FX and the lack of music is a drawback
Skill levels: 1
Screens: 25
General Rating: an intricate entertaining beat 'em up and very challenging.

EXPLORER

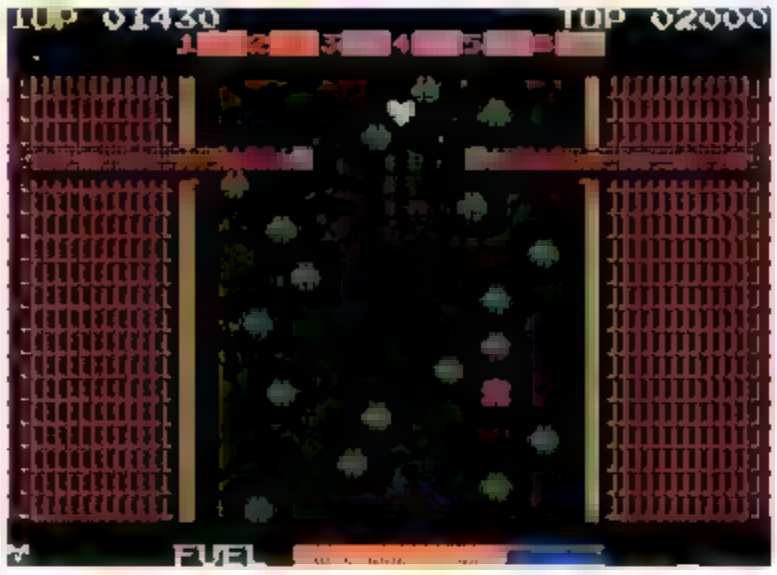
Author **Luca Bordoni**
Memory required: **48K**
Language **Machine code**
Released: **2015**

There was a time when being thrown into deep space to shoot random aliens and motherships was a common gig, but it seems those kinds of contract started to dry up after the early 1980s... until now! In 2015 Luca Bordoni rewrote this shooter from the late 1980s and, even though it's coded in (Boriel's) BASIC, it plays a lot better than many a machine code game of the era, albeit with a slight jerkiness to the scrolling.

After a short ditty announcing the start, you're suddenly plummeting through space in a shuttle while negotiating alien ships heading towards you. There's a familiar feeling to this though it isn't at first obvious why. However, once the walls in later levels start closing in, it dawns that it is a vertical scrolling adaptation of *Scramble*. But *Explorer* is relatively unique in that while most shoot-'em-ups scroll from the left or from the bottom of the screen, here you fly from the top down. Although the controls are only left, right and fire, you can feel your brain wrestling with what feels like a strange direction of travel.

While you can gain extra lives from points, such as 5000 for the first extra life, your priority (apart from not crashing) is to shoot the red fuel pods, otherwise the fuel gauge depletes and panic sets in with the alarm klaxon, swiftly followed by extinction.

Be aware too of the pause between each round of short range fire, which requires quick, well-timed bursts to despatch the enemies. So get ready to battle through six areas to achieve the ultimate goal of destroying the base at the end.



CRITICISM

• Every level of *Explorer* feels like a tribute to a favourite shooter, like *Centipede* on one level, *Asteroids* on another, and so on. This adds to that one-more-go factor, spurred on by the fact that you can get on the first rung of the high score table after a couple of attempts. Luckily, when you die you carry on exactly where you left off, which is a relief as it can get quite tough – let your concentration wane and you can easily die a few times in quick succession. Written in BASIC means you can't move and shoot at the same time, but this adds some strategy to the game because you have to move the ship into position quickly in order to have sufficient time to shoot the target.

The difficulty starts to ramp up when you hit Level 3, which is more a test of reactions and nerves as you find yourself flying into an asteroid belt. This level is more about survival than anything else; finding a path through the asteroids can be difficult, especially as you still have to shoot fuel pods if you want to make it through to the other side.

On Level 4, as the walls start to close in, it really feels like the later levels of *Scramble*. But Level 5 makes you realise the game has been relatively kind to you thus far. You need pixel-perfect precision to get through the ever decreasing gaps, and there is still one more level to go.

At first glance this all-round classic shooter looks basic in design, but there is variety along the way and a challenge most ardent space adventurers would revel in. More use of sound would have been nice, and added levels in the future will prolong its life, but *Explorer* is definitely worth checking out.

Phil Wheatley

CRITICISM

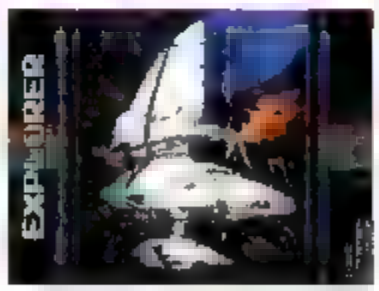
• Not to be confused with the 1986 game from Electric Dreams Software, on the face of it *Explorer* has the look and feel of a simplistic and very basic shoot-'em-up. But you start to play and soon realise there is a little more depth here than first meets the eye. What Luca Bordoni has done is pay homage to many of the arcade shooters of yesteryear all wrapped up into a delightful package of fun for the Spectrum, where hitting the high score of the day is the name of the game – simple aesthetics and sound with great gameplay.

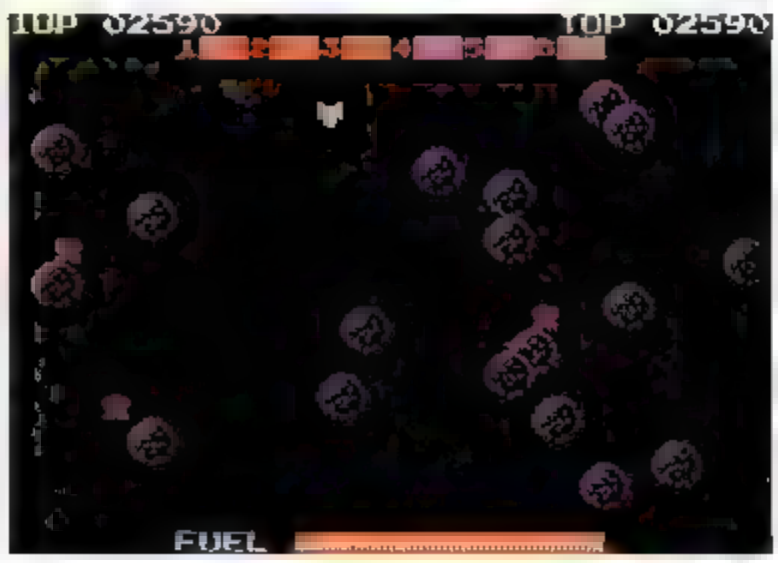
Chris Wilkins

COMMENTS

Control Keys: User definable
Joystick: None
Use of Colour: In keeping with the era, no colour clash and contrasts well against the background
Graphics: Small yet clear sprites, enough variety in each level to keep it interesting
Sound: Pretty basic but at least confirms you have either shot something or died
Levels: 6
General Rating: A very well executed, albeit basic shooter – with a twist.

Use of computer	85%
Graphics:	83%
Playability:	88%
Getting Started:	80%
Addictive Qualities	93%
Value For Money:	N/A
Overall:	86%





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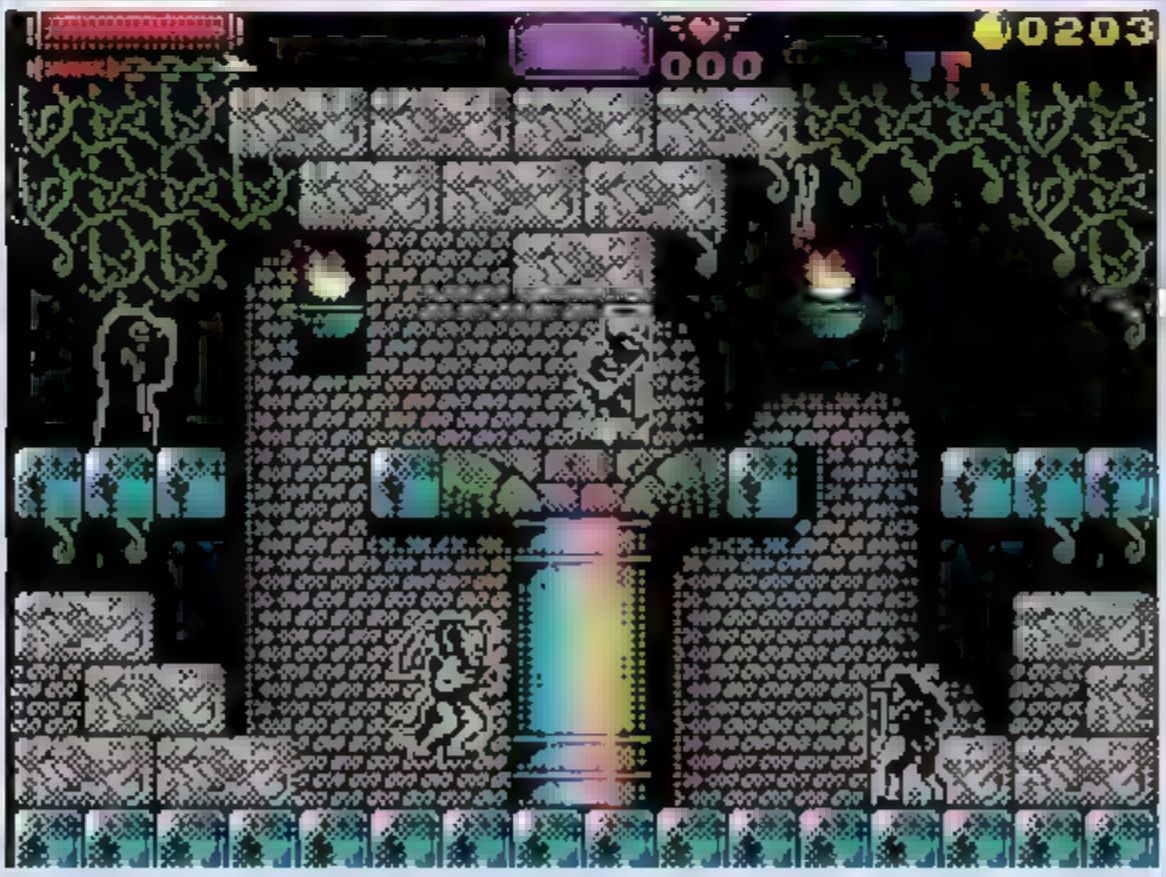
CASTLEVANIA: SPECTRAL INTERLUDE

Publisher: **Fan made**
Authors: **Aleksander Udotov, Vladimir Tugay, Aleksey Golubtsov**
Memory required: **128K**
Released: **2015**



Skeletons, werewolves, the Grim Reaper and a knife-hurling hunchback. Nope, these aren't people on Tim Burton's Christmas card list but just a few of the nightmarish denizens to be contended with in *Castlevania. Spectral Interlude*

Taking control of vampire hunter Simon Belmont, the objective is to rid the land of Dracula. But first Belmont must deal with his infernal chums and gain their powers to stand a chance against the dark lord. This won't be a breeze: to summon just one of Drac's pals, four pieces of a magic altar are needed, which are hidden all over the land guarded by an array of lesser (but still unpleasantly ferocious) monsters.

Simon's main weapon to combat the forces of darkness is a whip, which can be upgraded by finding extra parts and visiting the blacksmith in the town. Secondary weapons and magical attacks can also be purchased in the town but aren't particularly affordable and don't seem to last long making them something to be used sparingly.

CRITICISM

• *Spectral Interlude* doesn't stray far from the 'feel' of the early entries in the Castlevania series from nearly two decades prior. While it doesn't really bring anything new to the table, it's still a very solid, terrific fun action-adventure title that deserves to be played by fans of the series or anyone who wants to try their hand at classic monster slaying amid a setting of graveyards, dungeons, forests and castles.

The Castlevania games always featured great music, as far back as the original 1986 game, and *Spectral Interlude* follows its predecessors' footsteps, boasting an awesome soundtrack. Some songs are upbeat, some moody and atmospheric. A few tracks seem to suffer at times and start sounding crackly but – considering the limitations of the Spectrum – the overall sound is just great and adds so much to the game.

The impressive graphics and clear, detailed backgrounds help bring the Gothic-horror vibe of the Castlevania world to life. The character sprites are nicely defined and I can think of only one occasion when an enemy 'blended' into the background due to the colour limitations.

[illegible] element of narrative during gameplay, this has it in buckets. One minor gripe: if you just want to get on and whip some demons to death it can be irritating having to scroll through lots of text. The Castlevania universe has an expansive lore so it's nice that the game accommodates this while also adding some novel elements (and even explains away some inconsistencies in other Castlevania games).

A word of warning: this game is insanely difficult! I spent ninety minutes battling the Gorgon on normal mode. I think it's one of the most challenging boss battles I've ever participated in – and I have played a *lot* of games. But don't let that put you off if you enjoy a challenge and can wield a vampire slayer's whip like a pro.

Ryan 'Riot' Coleman

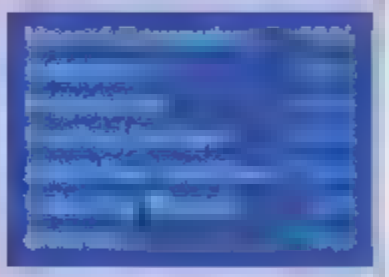
CRITICISM

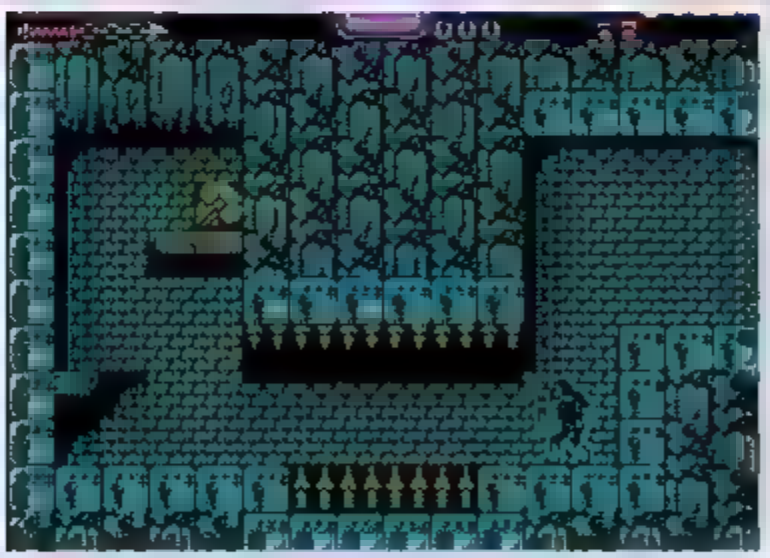
• Quite a tough game – harder than I remember the original Castlevania games. Nasties come at you pretty fast and you need to kill a lot of them for the cash that other characters are asking for the weapons and objects you need to progress. At least there are plenty of handy save points dotted around as you only have one life – and losing it a lot is a certainty. This is a game with plenty of exploring; it needs practice, practice, practice – it's not something you can drop in and out of. There's also a lot of muddled text to read through for snippets of what might be useful. A very ambitious game that could have done with maybe more playtesting from a less hardcore audience.

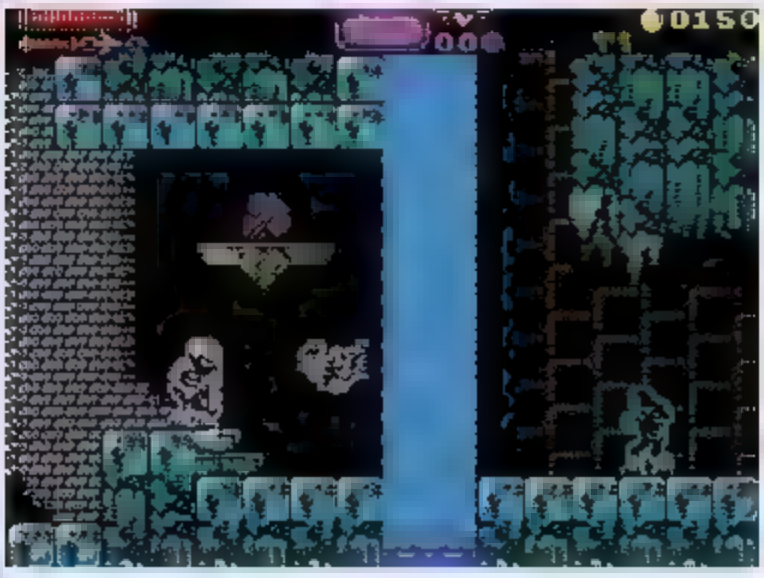
Jason Railton

COMMENTO

Control keys: Redefinable
Keyboard play: Responsive, making the game feel fluid and fun
Use of colour: Some sprite blending but otherwise clear and precise
Graphics: Good animation, detailed character sprites and backgrounds
Sound: Fantastic – catchy and brooding melodies
Skill levels: Normal and Hard
Screens: over 150 screens
General Rating: A worthy addition to the Castlevania series!







Reviews

DARK CASTLE

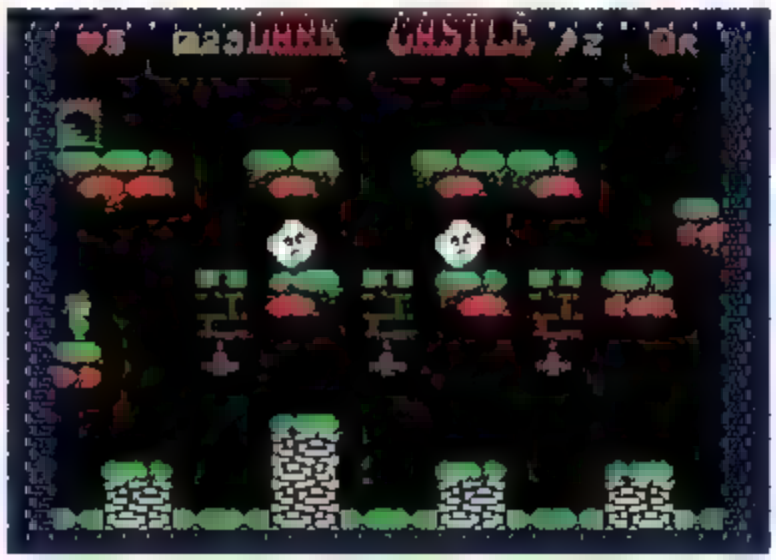
Publisher: **Fan made**
Author: **kas29 team**
Memory required: **48K**
Released: **2016**

In *Dark Castle* (not related to the 1986 release on the Macintosh of the same name) Bob is a farmhand who has become bored with his job and wandered off to a nearby castle, not realising that it is swathed in perpetual darkness and home to more than a few spooky spectres. Now he must try to escape the shadowy stronghold in less than an hour or else he too will become a permanent resident.

The game commences in the dark, with only a few candles for illumination to guide you on your way. Fortunately, there is a torch which lights up a whole room, but don't take too long taking it in because the torch lasts only a short time before going out and plunging you back into the dark. And that means having to guess in which direction lies the exit.

CRITICISM

• The story may sound exciting, but the gameplay is lacking. To finish, you must navigate through 25 screens of darkness, using a torch to illuminate each one just for a few seconds – hopefully long enough to memorise the path for Bob to take to reach the next room. Most screens feature platforms invisible in the dark, so jumping between them is frustrating. After repeatedly missing the same platform the game soon starts to feel more like a chore than a leisure activity. There is an option to reset a screen, which allows the room to light up



for a few seconds, though it places Bob back at the start of that screen and adds a five-minute penalty to the timer when this happens – and when the timer reaches an hour it's game over. An hour sounds like an ample amount of time but it quickly depletes on contact with ghosts.

Dark Castle has a few positives, the first being its nice, vibrant graphics. Unfortunately, as most of the game is spent in darkness, there isn't much of a chance to appreciate them. The other notable point is the music (which plays throughout on 128K models). It's both eerie yet melodic – in fact so good I think it's wasted on a game like *Dark Castle*.

Ryan 'Riot' Coleman

CRITICISM

• A neat idea – a platformer you play in the dark. Graphics and sound are good and it's a real challenge. Especially handy are some instruction pages as you play the first few levels. But why let me pick joystick control and then tell me I have to use key presses to activate features in the game? You can use a match once per play to view the full layout of the room, but it's never enough. It starts to become routine to deliberately fail and restart, so you can reuse this feature at a later point in the level. You can try and remember platform positions relative to the always visible candles, but they're not placed in a way that makes that easy. And most annoying of all, if you try to move around while your 'match' is making the level visible, when it does go out there's a disconcerting flicker of the screen where even your character vanishes, often making you fail a jump. If a tricky test of dexterity and memory drives you... great. But for me it needed more variety to make me want to keep coming back for more.

Jason Railton

COMMENTS

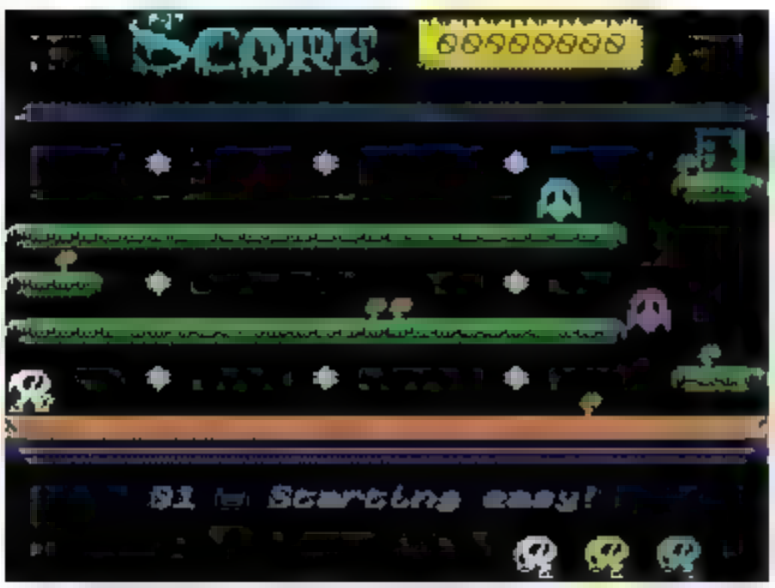
Control keys: Keyboard, Kempston, Sinclair
Keyboard play: Responsive but Bob never seems able to jump far enough
Use of colour: Limited, though appealing when the screen is illuminated
Graphics: Nice details but again limited by the darkness
Sound: The atmospheric music is the game's best part
Skill levels: Fixed
Screens: 25
General Rating: This game feels like an annoying part of a game you can't quite place from years ago – sadly not just one annoying level, it's an entire game

Use of Computer	45%
Graphics	54%
Playability	50%
Getting Started	60%
Addictive Qualities	40%
Value for Money	N/A
Overall	49%

HORACE IN THE MYSTIC WOODS

Publisher **Monsterbytes**
Memory required **48K**
Author **Bob Smith & Mister Beep**
Language **Machine Code**
Released: **2010**

Horace is back. One of the most recognisable and best-loved computer game characters once again graces the Spectrum. Originally written by Michael Ware for the Psion-3a palmtop in 1995, the original code was picked up by Bob Smith – he of many Cronosoft games – and converted to Horace's spiritual home. Horace is deep in the Mystic Woods and you must guide him through 64 single screens of cunning platform gaming by collecting the stars on each level to progress to the next.



CRITICISM

• Platform game comparisons are inevitable and a cursory glance might give the impression it's a *Manic Miner* clone. However, the mechanics of *Mystic Woods* are wildly different to many platform games. While some demand pixel perfect jumping *Horace In The Mystic Woods* is more forgiving of your jumping precision as you have to contend with inertia. A faster run up means a bigger jump. This also means a greater stopping distance and takes a little time to master.

While technically this is very well executed, the inertia element can thwart the gameplay – you don't stop immediately, frequently slip from platforms and often overrun into baddies. It makes the game testing and, at times, flirts with keyboard punching levels of frustration. Fortunately, there is the option to restart where you died and, in reality, this is the only way to progress through the 64 levels in one sitting. You can also redefine the keyboard controls and change the difficulty level. Note: easy is still hard.

Graphically, *Horace In The Mystic Woods* keeps the flavour of previous Horace games while the animation is fluid and smooth with colour clash kept to a minimum. The intro/outro music and sound effects are also spot on thanks to Mister Beep's good work, and Horace's death scream is an unexpected bonus.

It's lovely to see Horace once again, like a fluffy comfort blanket of nostalgia embracing you. It then smothers you with its brick hardness. *Horace In The Mystic Woods* is undoubtedly an accomplished conversion. It's playable with some wickedly devious puzzles sprinkled throughout. A fine addition to the Horace family which will keep you busy for months.

Richard Burton

CRITICISM

• Classic Spectrum platforming with a classic Spectrum hero. Levels are nicely designed with plenty of room to jump around. The inertia takes a bit of getting used to particularly the way you bounce off the edges of the screen, but is all part of the game. Collision detection can be a bit iffy, but there's usually enough room to keep well clear of the baddies. Overall

an enjoyable romp that would pass as a high-quality game from the Speccy's heyday.

Jason Railton

Control keys: Cursor and redefinable keys
Joystick: Kempston, Sinclair
Keyboard play: Reactive and plays well
Use of colour: Nice use throughout the varied levels
Graphics: In keeping with previous Horace games
Sound: Great title and end game music. Solid effects
Skill levels: 3
Lives: 3
Screens: 64
General rating: A challenging game with an extra dollop of nostalgia added

Use of computer:	85%
Graphics:	84%
Playability:	85%
Getting started:	83%
Addictive qualities:	86%
Value for money:	N/A
Overall:	**87%**

IN THE WALLS OF ERYX

Publisher: **Arkham House**
Author: **Kevin McGrorty**
Memory required: **128K**
Released: **2016**

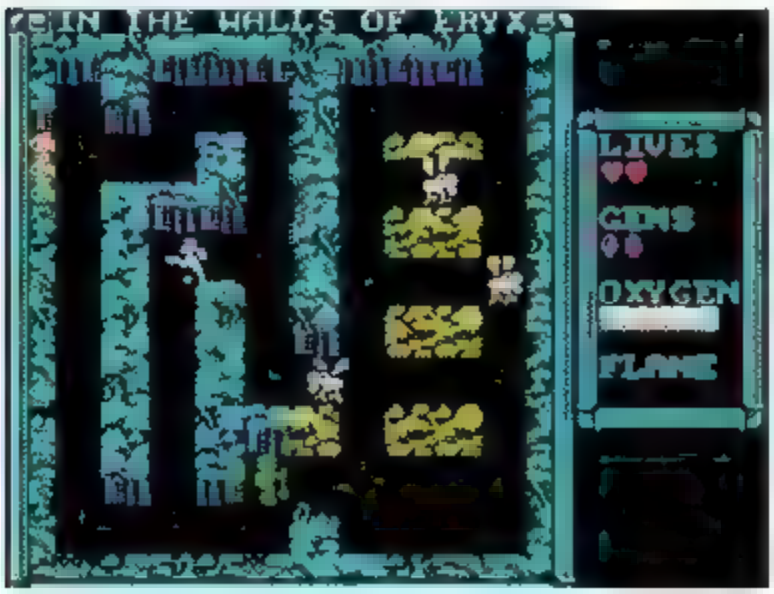
With Venusian Lizardmen, Farnoth Flies and an invisible Labyrinth you can feel you're entering the world of a twisted fantasy inspired by HP Lovecraft and Kenneth J Sterling's story of the same name. The game begins with a certain Private Stansfield standing in front of his burning spacecraft, which has crash-landed in the Erycinian Highlands of Venus, tapping his foot. The goal is to guide Stansfield through the jungles of Venus looking for six power crystals. However, the Venusian wildlife isn't overly fond of the gem-snatcher and seeks to end his pilfering ways. To top it off his oxygen is rapidly running out. You need him to get the power crystals, keep his oxygen topped up and survive long enough to escape the Lovecraftian 8-bit planet behind.

• *In the Walls of Eryx* is reminiscent of classics such as *Rex* or *Myth*, particularly in the character animation and there are many subtle details such as our hero tapping his foot. But stop wasting time admiring nicely animated sprites! Your resources are limited – running out of weaponry and oxygen has fatal consequences. Mastering the enemies' tactics is required to succeed here.

The game comes with a cassette cover to cut out and also a rather splendid loading screen, although on occasion the screens look the same, but for those of us that grew up gaming on the Spectrum this similar 'look and feel' selection of screens is easily forgiven.

The only real bugbear is the lack of music: there are plops and beeps when it comes to sound effects, but no music for this 128K game. It's crying out for a cool tune to run along with it. In spite of this, I found *In the Walls of Eryx* enjoyable to play: it's easy to pick up, it looks good and it is rather easy to guide Stansfield around the screen. Here's another great free-to-download title you can add to your ever-expanding list of Spectrum games.

Rod Bell



• This has some nice ideas but overall it's a bit slow. Negotiating a single-path maze as the oxygen ticks away gets a bit tiresome, but when there are enemies to plot your way around or choices to be made in the mazes it becomes more interesting. There are nice touches like traps to lure the baddies into, demonstrated early on by a neat set-piece that acts like a tutorial of what's to come. But then you get stuck with another screen that's just about plodding and the fun goes out of it again. This isn't a maze game, really. You get through one screen at a time and move onto the next. I gave it a few goes to see what came next, but I think it will need quite some patience to stick with it for longer.

Jason Railton

Control keys: Q, A, O, P, SPACE
Joystick: Kempston, Sinclair
Use of colour: Limited, but no colour clash
Graphics: Nicely detailed graphics with well animated adversaries and main character
Sound: Beeps, no music
General rating: Solid exploration type game that can be a little slow

Use of computer:	82%
Graphics:	84%
Playability:	83%
Getting started:	87%
Addictive qualities:	82%
Value for money:	N/A
Overall:	**84%**

WAKE ME UP!

Publisher: **Fan made**
Author: **La Moderna Soft**
Memory required: **48K**
Released: **2015**

Wake Me Up! is one of the stranger Spectrum titles released in the past few years. You play an adventurer who has fallen into a terrible nightmare from which he must awaken by solving an array of puzzles and overcoming numerous enemies. The most striking thing is the game's fond nods towards pop culture, as well as its great sense of humour.

The intro features Darth Vader igniting his lightsaber accompanied by an 8-bit version of the Imperial March theme from *The Empire Strikes Back*, and then there's a swift cut to an animation of the Death Star exploding. This has absolutely nothing to do with the narrative, but any Star Wars fan will appreciate the bizarre homage.

The gameplay itself is fairly diverse for an adventure/platformer with the nightmare-ridden hero having to alternate between shooting certain enemies, and flat-out avoiding others. There are also many different puzzles to solve, which usually involve accessing a computer terminal and playing the mini-games that appear on each screen, with every game being very different and often quite challenging.

learning to tap the movement keys as opposed to properly pressing them down, it is manageable.

The music is particularly good, with the main theme tune playing every time you reach a puzzle. Although the tune isn't particularly nightmarish, it is fun and catchy, complementing *Wake Me Up!*'s overall light-hearted feel.

Ryan 'Riot' Coleman

a dreamworld but that doesn't necessarily translate into good gameplay. The mini-games are a nice idea, but their implementation is crude compared to the rest. Jumping is tricky too, particularly when moving up or down between screens. There are some good ideas here and it's worth exploring, but it's not a game that keeps calling me back.

Jason Railton

CRITICISM

• The graphics are good for the most part, though some character and enemy sprites look like simplified stick drawings this looks more like a stylistic choice than poor design. The controls are responsive but perhaps a little too sensitive during some of the mini-games, which can really hinder a quick completion of each puzzle. But with a bit of patience and

CRITICISM

• A bit of an oddball game. Discovering what's what is, I guess, part of the game, but it's all pretty random. There are puzzles to solve and objects to collect, but the two don't necessarily meet under any sort of logic. For example, there's a fireball weapon but it does nothing to enemies and only seems to help in one small puzzle. Logic may not apply in

COMMENTS

Control keys: Keyboard only
Keyboard play: Responsive
Use of colour: Bright and appealing
Graphics: Simple but effective
Sound: Great music and adequate sound effects
Skill levels: 3 (for a laugh try out 'baby' level first)
Screens: 30-plus
General Rating: Fun game with a lot going for it. Don't take it too much to heart as *Wake Me Up!* certainly doesn't take itself seriously.

Use of Computer:	80%
Graphics:	80%
Playability:	
Addictive Qualities:	70%
Value for Money:	N/A
Overall:	83%

ZOMBO

Producer: **Monsterbytes**
Memory required: **48K**
Language: **Machine code**
Author: **Malcolm Kirk**
Released: **2015**

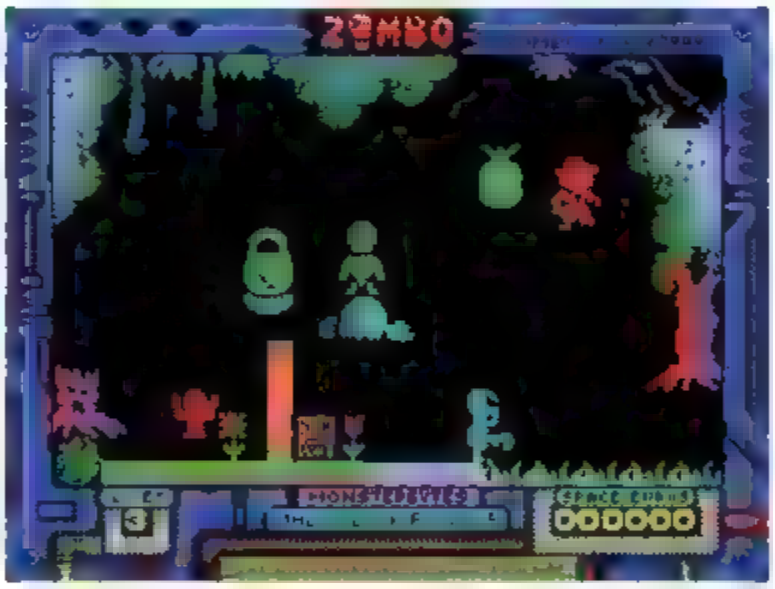
There have been several *2000 AD* themed games over the years; some were good, some were right old stinkers while others never made it past development. Although *Zombo* is a fan homage and not officially recognised by *Rebellion* or *2000 AD*, it's great to see the back catalogue of characters from the galaxy's greatest comic being explored once again.

Say hello to *Zombo*. Created by Al Ewing and Henry Flint forthe *2000 AD* comic and converted to the 8-bit world of the Spectrum by Malcolm Kirk. You play Zombo, a failed super-soldier experiment created by a shady organisation known simply as The Government. You have been tasked with saving the six survivors of Flight 303, which plummeted onto the proto-sentient world of Chronos, a deathworld inhabited with things that want to kill you in horrible ways. What's new?

The gameplay consists of 24 interconnected screens in which Zombo must find and rescue the six crash survivors. There are three keys to collect in order to gain access to locked areas. Once the survivors are rescued, you send Zombo off to locate and

dispatch the end-of-game adversary, Zombo's arch nemesis and his palindromic evil opposite, Obmoz.

Zombo follows the familiar arcade-adventure path, where you search, find and eventually exit stage right. Other objects are strewn throughout, the most important of them being the Shootybang 2000, a weapon capable of eliminating most of the dangerous inhabitants. That said, it can only shoot left and right



CRITICISM

• *Zombo* was created with Jonathan Cauldwell's *Arcade Games Designer* and while 24 screens may not be something to sink your teeth into long term, part of *Zombo*'s charm is that you can dip in and out at will. Sometimes ten minutes will be enough to complete it, sometimes Obmoz will beat you. It's ideal for gaming on the move.

While the graphics are adequate and functional they do work very well. The collision detection occasionally leaves a bit to be desired but you soon learn to give everything that moves a wide berth.

It should take several concerted efforts to complete *Zombo*. The learning curve is as mild as they come and getting started is a breeze. However, defeating Obmoz is no simple task.

Overall this is a great pick-up-and-play game for that instant burst of Spectrum gaming gratification. What it lacks in longevity it makes up for in undiluted short-term playability.

Richard Burton

CRITICISM

• A lot of fun to be had here, exploring the landscape as a government-employed zombie 'rescuing' surviving humans. Sprites are big and well animated, sound effects are clear and simple, and there's a great sense of humour in the messages that pop up. However, it can be annoying having to press a key to clear the messages, particularly if you're playing with Kempston joystick and especially if you have to follow it with a life-saving move out of the way of a marauding nasty. And maybe if your character was a few pixels smaller than some of the gaps you have to wait in, your deaths might seem a bit fairer. But these annoyances aside, it's an enjoyable game you'll want to explore just to see what comes next.

Jason Railton

COMMENTS

Control keys: Q up, A down O left, P right, SPACE fire, H pause
Joystick: Kempston, Sinclair
Keyboard play: Fast and responsive
Use of colour: Monochrome sprites, functional backdrops
Graphics: Crisp sprites but some flicker. Great loading screen
Sound: The standard squelches and beeps. No music
Skill levels: 1
Lives: 3
Screens: 24
General rating: Small, simplistic but enjoyable.

COMPLICA DX

Publisher **Homebrew**
Memory required **48K**
Language **Machine code**
Author **Einar Saukas, Dave Hughes & Yerzmey**
Released: **2015**

An apparently simple game, *Complica DX* is a fresh new take on the venerable two-player *Connect 4* in which players choose a colour and then take turns dropping two colours of discs down into a seven-column by six-row grid. The idea is to be the first to form a horizontal, vertical or diagonal line of four tokens while simultaneously blocking your opponent from doing the same.

In *Complica DX* the 'tokens' take the form of angels and demons on the first level, and then its Robots versus Aliens, Squids against Fish and battles against storms, flies, even apples (!) and so on, each level growing increasingly difficult. Unlike *Connect 4* you don't need a second player because you can pit your wits against **Brainiac**, described as:

an Artificial Intelligence algorithm implemented as recursive Minimax strategy with alpha-beta pruning, highly optimized for Z80 registers allocation, using heuristic evaluation and arbitrary recursion depth, multi-tasked in background from machine state controlled multicolour animated graphics.

After the loading screen, you're away and the first bug-eyed character bounces across the screen and patiently waits for you to choose from the numbered columns 1–4. Simply press the number you want and your angel drops through the flames to take position at the bottom of the screen. (On later levels other devices amusingly suited to the types of player characters replace the flames.) Immediately the AI sends a devil stomping across the flames and without hesitation leaps down his chosen path. Simples!

But don't get too cocky. Just when you're pretty sure you have the level beat as the opposition runs out of options and all you have to do is wait for the rows to fill up and get your four in a row to win, disaster strikes! As a demon jumps into the last column, the entire column shifts down one position turning your potential winning row into a jumbled pile of critters. Winning is possible of course, but it takes quick thinking and perseverance.

C·O·M·P·L·I·C·A D·X

CRITICISM

• Never judge a book by its cover and never assume something before you try it yourself as it will more than likely make an **ASS** out of **U** and **ME**. You'd think a 42 year-old wouldn't still make assumptions, but when I heard this game was a new take on the classic family game Connect 4, my initial reaction was far from thrilled. However, I was wrong again.

First of all, your senses are constantly assaulted (in a good way) by an arcade-style loading screen which could evoke visions of *Space Harrier* meets *Centipede*. Then you can almost feel your C64 neighbours peering over the fence in envy at the awesome anthem sounding soundtrack. Beyond the loading screen and story board, you get another great tune, this one more upbeat and electronic sounding while you consider the menu options, to practice, choose how many players you want, or just head straight into the action. Once the game commences you are treated with more music in the form of a funky in-game ditty. Yerzmey really deserves credit for his musical contribution to the game.

In short, the experience was quite different to what I first expected, and has reaffirmed I should play a game for myself first before assuming what it is going to be like beforehand. A great little game which could easily be played on your own, or even used as a way to introduce a little critter of your own to the wonderful world of Spectrum games!

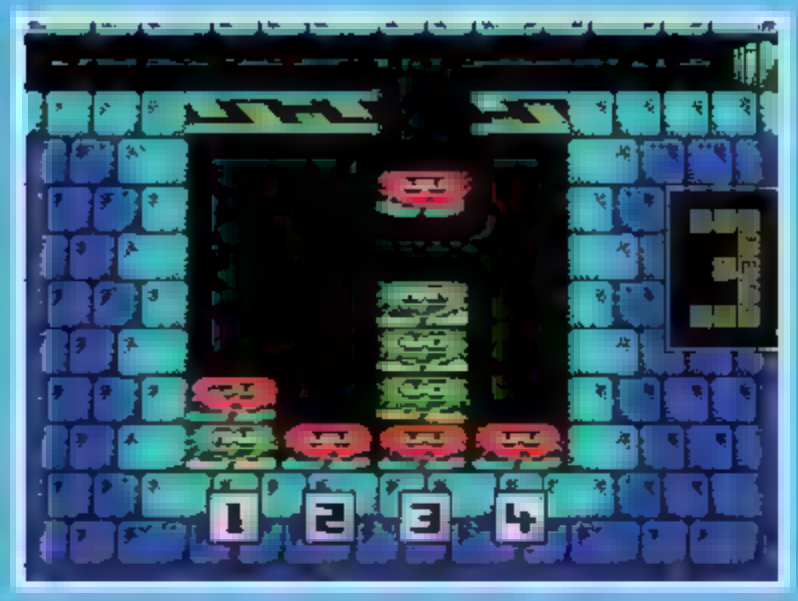
Phil Wheatley

CRITICISM

• Connect 4 with a twist – once full, a column can be pushed down by another player. And you will not believe your Speccy could be this smart! A pleasingly tough challenge, and well worth coming back to with a new strategy when you get beaten (and I was often).

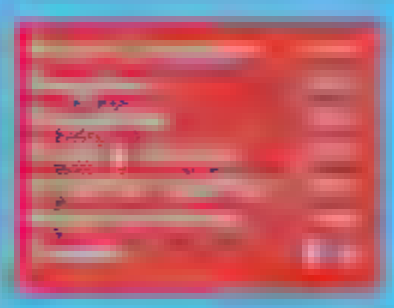
Complica DX boasts some charmingly animated and multicoloured sprites, as well as fantastic 128K tunes but remains sadly tuneless for 48Kers. My only complaint might be that the slow falling of pieces drags the playing time out.

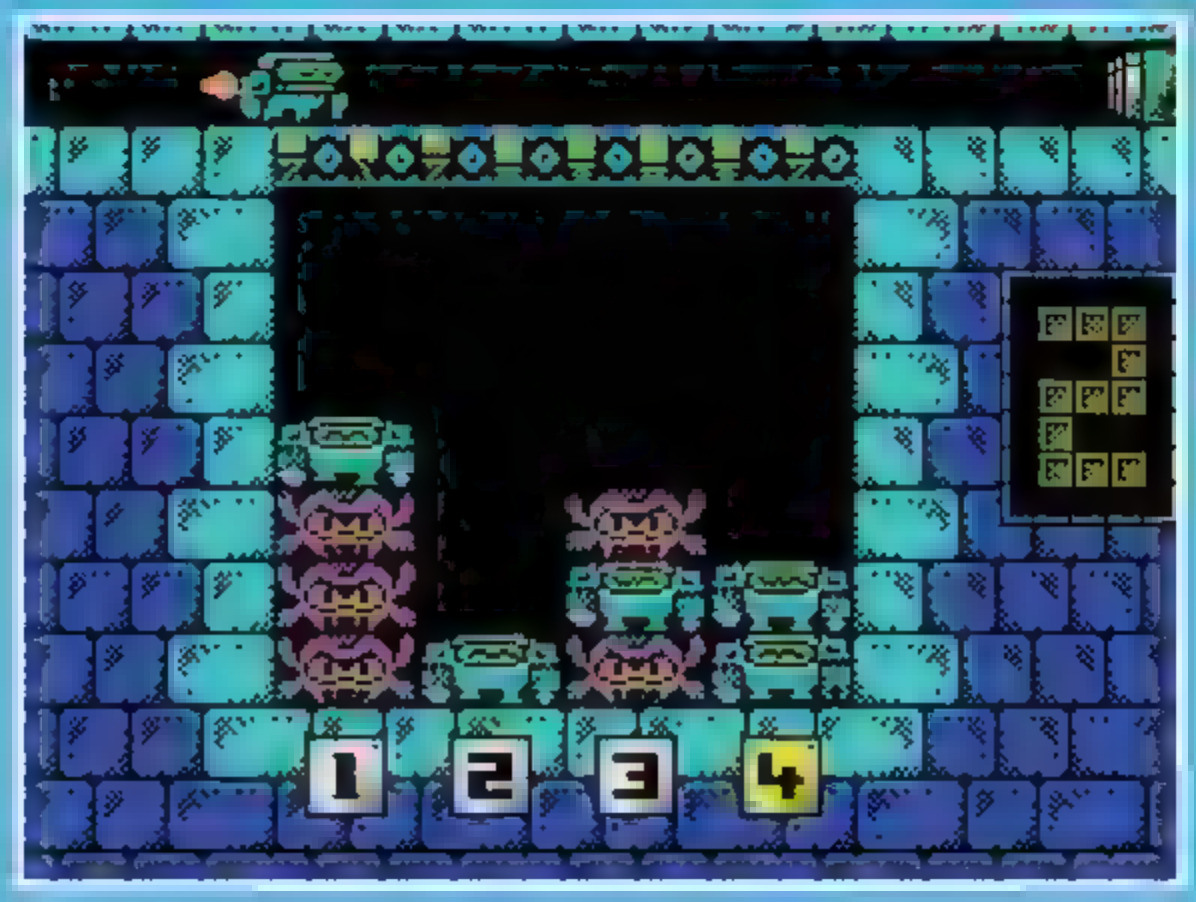
Jason Railton



COMMENTS

Control Keys: 1, 2, 3, 4
Joystick: Keys only
Use of Colour: Great, bold colours, no sign of colour clash and makes it easy to see what is happening
Graphics: Nicely sized sprites by Dave Hughes and enough variety in the different types of characters to make you want to progress and see what comes next
Sound: Yerzmyey's music is fantastic, three different tunes of very high quality. No sound effects but they aren't really needed
General Rating: A great game, fun to play despite its basic concept





THE DARK

Author: **Oleg Origin**
Memory required: **48K**
Released: **1997, re-released 2016**

When the Army of Dark Forces slaughtered the people of the Land of Winds, only a few escaped with their lives and fled to safety. Among them was Jane, who soon after gave birth to a son, Alexander. Fired by the story of his people's fate, when Alexander grew up it became his mission to reclaim his homeland. This is where you come in, taking Alexander's role.

The game plays from a first-person perspective with the main view at the top of the screen together with a compass, your health and armour levels along the bottom. Here you also find the weapon you are currently holding and the ammo supply. A tap of the SPACE bar brings up the map of the region in the upper two-thirds of the screen.

What can you expect to find hidden in the maze while trying to escape? Nothing good – all manner of nasty creatures lie in ambush. Grotesque looking evil trolls, killer bees and huge monsters that resemble very scary Vikings are vying for your blood, so there's plenty to keep an adventurer on their toes. You won't need to bloody bare hands from the outset because you start off armed with what looks like Poseidon's Trident, though this multi-coloured weapon is so much more fashionable. Progress through the maze to find other weapons, such as handguns, in various boxes so you don't have to get too close to rid the place of its infestation.

Aside from collecting weapons, you have to find your way out of each maze and of course the monsters are out to get you. They aren't shy when it comes to making their presence known, jumping out in front of your face, though there are the odd ones who enjoy creeping up from behind. The scary sound they make when they're attacking really adds to the atmosphere. It's similar to the noise you hear in the game *Aliens* when there's something close by that wants to eat you. The audio effect is combined with a flashing red screen while whatever is attacking tries to have you for breakfast. It makes for a very terrifying time indeed.

CRITICISM

The Dark is a brilliant achievement in gaming for the Spectrum. The large

sprites, smooth scrolling and large levels are something to be applauded, especially given that it's squeezed into 48K of memory. It's easy to see why *The Dark* is often compared to the likes of *Doom* and *Quake* as you'd be hard pushed to find anything closer to either of those games on the humble Speccy. Sound is minimal, aside from the speech during the intro, but it's used well. You could say that maybe it is a little on the tough side but then, we all like a challenge, don't we?

Paul Davies

CRITICISM

• This game stuns you from the start by reading out the backstory even on a 48K machine. It's an impressively smooth and colourful FPS with a pleasant balance of key-finding and monster-shooting to progress. The drawback is that the detailed sprites don't scale well, meaning that the larger monsters pop up in your face before you can react. When you can see something in the distance, aiming to shoot it can also be a problem as you turn in too big a step, and there's no strafe control. Nevertheless it is a novel experience on the Spectrum and well worth checking out.

Jason Railton

COMMENTS

Control keys: Q, A, O, P, M, SPACE = map
Joystick: Kempston, Cursor, Sinclair
Keyboard play: Very responsive
Use of colour: Excellent. Used to great effect on those huge sprites!
Graphics: Large, bold, bright sprites – awesome!
Sound: Simple, but put to good effect
Skill levels: Tricky
Lives: 1
Special features: Currah microspeech
General rating: A well-deserved CRASH Smash

Use of computer	98%
Graphics	95%
Playability	92%
Getting started	90%
Addictive qualities	91%
Value for money	N/A
Overall	94%

Reviews

VALLATION:
Escape the Pirate Planet

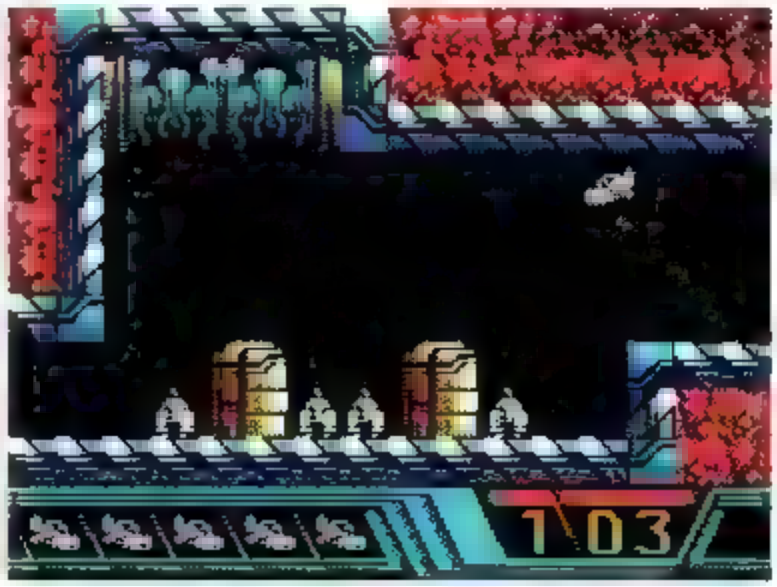
Publisher **Tardis Remakes**
Author **Sokurah**
Memory required **48K**
Released **2016**

Vallation – an obvious homage to Hewson's *Cybernoid* – appeared first on the Commodore 64, created by Jason Kelk (aka Cosine) for the RGCD C64 Cartridge Development Competition 2013. Søren Borgquist (aka Sokurah) then ported it to the Spectrum.

You are trapped inside an enemy complex, the space base of pirates. The idea is to escape the extensive maze without getting shot by numerous enemies (also not present in the C64 version), vaporised by laser barriers, rammed by patrolling craft or obliterated by the many rockets lining the path to freedom. As there are 30 screens more than the C64 version, spread across four levels, the task ahead is a difficult one. *Vallation* is less punishing than *Cybernoid* because you're not against a clock, enemies don't spawn constantly and you control the descent of the craft, not gravity.

CRITICISM

• Though it's nowhere near as frantic as the Hewson classic, *Vallation* still has some excellent touches of its inspirator throughout. It has just the correct amount of difficulty to make you work for your goal, the map is spread out well, and the rockets cause a satisfying level of bother. The whole game looks excellent and colourful, thanks to Craig Stevenson (aka Redbaloon) and there is some excellent music from Johan Eiebrink



(aka Brink). The only negatives are that there could be more variety in the enemies and perhaps some way to also destroy those pesky rockets!

Sokurah, Redbaloon and Brink have delivered a fine game for the Spectrum and I hope Cosine and Raffaele Cecco are happy to know that their work is still being honoured within today's Spectrum homebrew community.

Rod Bell

CRITICISM

• A fantastic looking game in the *Cybernoid* mould, with some great 48K music. Instead of fanciful weapons, you can simply destroy any of the roving baddies if you shoot them enough times. Problems come though from everything moving too fast. An early level where you have to spoof a missile into launching then dodge out of its way, is in such a confined space that your U-turn manoeuvre will take a dozen attempts to perfect. Screens alternate between a doddle and insanely hard as you progress; a little more ramping up of the difficulty would be better.

Jason Railton

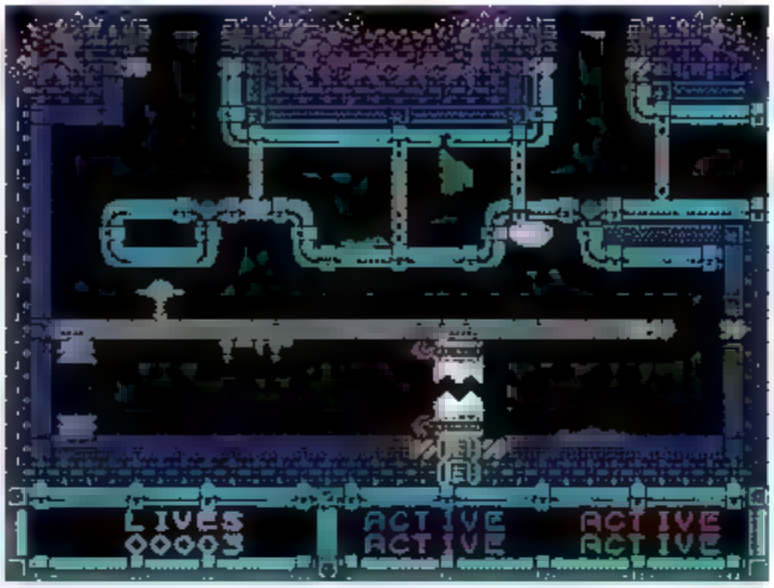
COMMENTS

Control keys: Definable
Joystick: None
Keyboard play: Responsive
Use of colour: Bright, varied
Graphics: good sprites, lacking a little variety
Sound: Suitable effects and some classic Brink music
Screens: 101
General rating: A C64–Spectrum port done with much love

Use of computer	88%
Graphics	85%
Playability	86%
Getting started	90%
Addictive qualities	84%
Value for money	N/A
Overall	84%

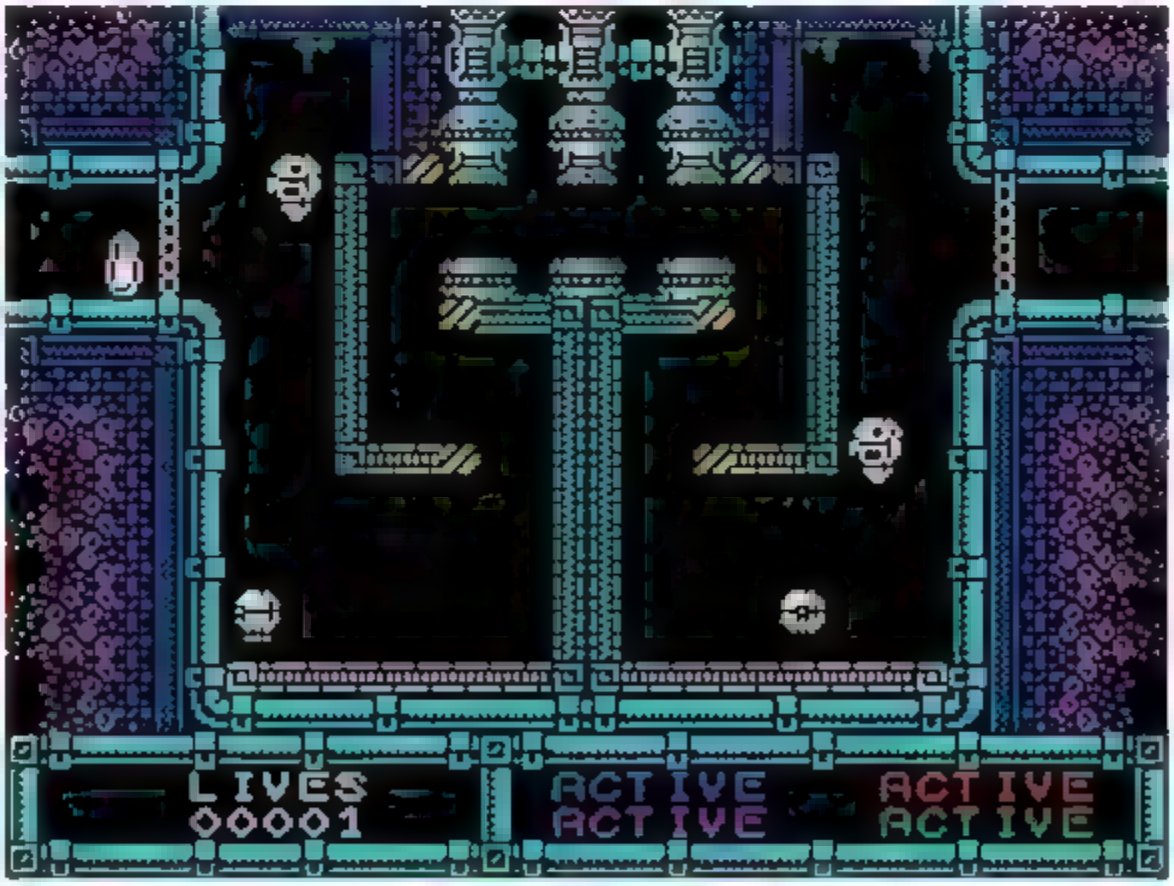
OOZE

Publisher: **Bubblesoft**
Author: **Andy Johns, David Saphier**
Memory required: **128K**
Released: **2017**



With *Monty Mole* consigned to the backburner for a moment, Andy Johns (Bubblesoft) has put his well-used copy of AGD to excellent use again and released a rather slimy protagonist onto the platforms of *Ooze*.

The task ahead is to guide an amoeba blob through a maze of pipework, conveyors and many deadly mechanical obstacles. These horrors include animated sparks of electricity, sharp-edged mechanisms and deadly plumes of green gas – while you're searching for the key that can enable access to the next section of the perilous journey.



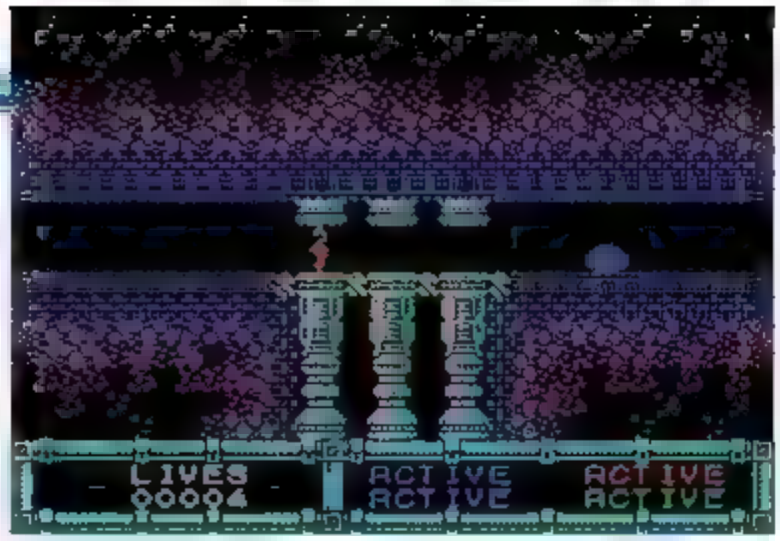
Game controls are simple and since the blob is a globule of slime lacking any appendages, no shooting is involved, and the game's objective is to find a route through the maze and avoid dangerous objects as you do so. Ooze itself can jump up to cling under surfaces, while the jump button reverses gravity so the blob can 'drop' from floor to ceiling to cling under surfaces and then back again. In this way it's possible to 'leap' up and hide from a passing enemy until it's gone on its way.

CRITICISM

• This title has a bit more up its sleeve than pretty graphics and addictive, entertaining gameplay. Aurally, Andy has really pushed the boat out with *Ooze*, securing the services of none other than Miguel/CPU and Rayden/Vitali for the intro tune and in-game music respectively, giving the AY chip (and your ears) a real treat.

In short (in my humble opinion) *Ooze* is a future classic. From the classy title screen onwards, this is a Spectrum platformer of the highest order, with well thought out level design filled with gorgeous clear graphics, and a well animated main character, baddies and obstacles. Easily as good as some of the most fondly remembered from back in the day.

Ant Harper



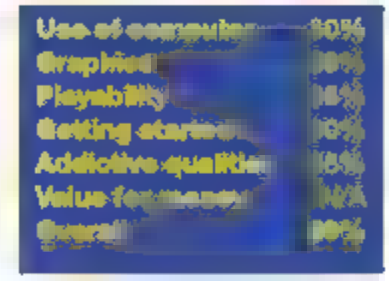
CRITICISM

• Ooze makes for a playable exploratory platformer, and I love the ability to reverse gravity to get around. Rooms which seem difficult or impassable suddenly change entirely when you think about running across the ceiling instead of the floor. The scenic graphics are excellent, showing great use of colour. Counting against it, it's another AGD game where background detail is too easily confused with platforms or obstructions, or just innocent looking details that turn out to be deadly. The music playing throughout the game is annoyingly repetitive, with seemingly no way of shutting it off. Play in silence, though, and you're treated to a fun and slickly presented game that keeps you busy just exploring.

Chris Wilkins

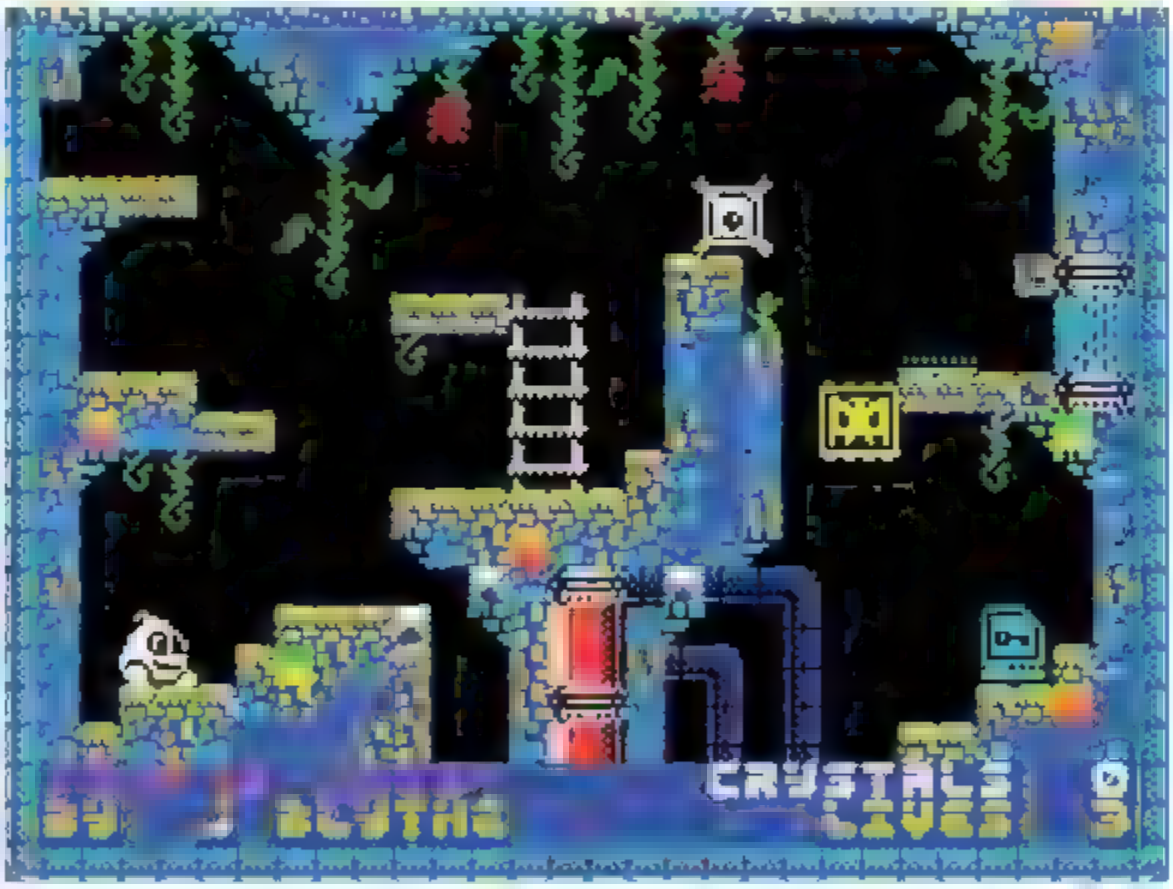
COMMENTS

Control keys: O, P, SPACE
Joystick: Kempston, Sinclair
Use of colour: Subtle use on each screen – works well
Graphics: Detailed, with nice little touches, like fumes escaping from pipes
Sound: Beat bop type 128K menu tune, tense 128K in-game music
General rating: An enjoyable adventure.



FOGGY'S QUEST

Publisher **Bumfun Software**
Author **John Blythe (Rucksack Games)**
Memory required **48/128K**
Released **2017**



The eponymous hero of this game – subtitled *To Narg And Back Again!* – is an inter-dimensional holiday-maker, and one who looks somewhat ghostly in appearance (he could certainly do with topping up his tan). Thus, on a suitably summery day, Foggy decided to take a trip to the unexplored Dimension 52b. Predictably, a load of envious, unpleasant beings inhabit the place. They are the nasty NARGs and they want the power of Foggy's spaceship, particularly the Tri-Crystal Prismatic Phase engine.

They ransack the ship and make off with all the valuable bits, including the essential Dimension Splicer. The game begins as Foggy escapes from the NARG thieving frenzy into the caves beneath the surface and it's up to our amorphous hero to explore the strange world and get his engine parts back.

Foggy's Quest is a flick-screen platform game that has been designed using Jonathan Cauldwell's Arcade Game Designer. The player guides Foggy around the screens, collecting items, solving puzzles and avoiding the nasty NARGs.

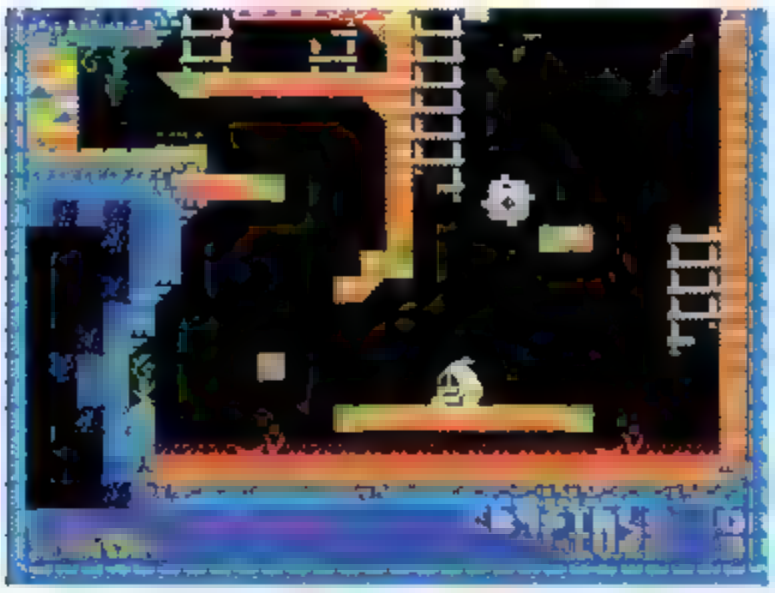
He can store several items in his inventory, simply picked up by walking over them. However they are only of use on encountering one of the Object Pads dotted around the caves. Touch one and a blue particle patch rises up displaying any items Foggy's collected and he can select an item from the menu. Using the item in the right place provides a piece of the puzzle.

A typical tourist, Foggy went on his travels unarmed, and as contact with a NARG is fatal, it's best he avoids them, equally so, dropping into a lava pit causes instant death.

CRITICISM

• On loading *Foggy's Quest* I was at first impressed by its cute characters and jaunty ditty. But once playing I found it a bit of a disappointment. Created using game designer software, it was never going to be revolutionary, but there are a few annoying things that further let it down. Like many a platformer of old it's tough and the playing screen lacks the openness you got with classics such as *Jet Set Willy*. That said, with some perseverance there is more here to enjoy, but maybe one for platform game freaks only.

Graeme Mason



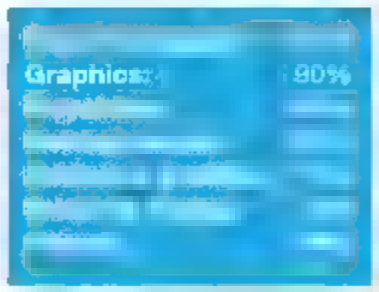
CRITICISM

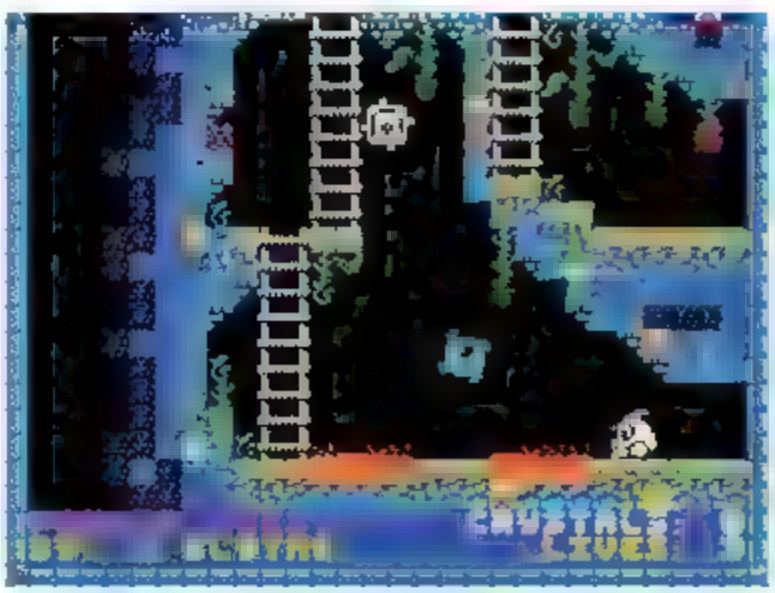
• This ain't bad looking for a game made with Jonathan Cauldwell's *Advanced Game Designer* software. oh and it's playable as well. The graphics are bright, colourful and very pleasing on the eye with a lot of variety in each screen as Foggy traverses through them. Against these pleasing aspects it does become run of the mill. It's the type of game that we've seen many times before in the Spectrum's back catalogue – a dodge the moving enemy, flip screen, collect the items and solve the puzzles adventure. Saying that, it has been done very well here.

Chris Wilkins

COMMENTS

Control keys: Q, A, O, P SPACE,
Joystick: Kempston Sinclair
Use of colour Makes each screen jump out at you
Graphics: Detailed backdrops and great attention to detail like hanging vines, enemies influenced from games like *Jet Set Willy*
Sound: In-game tune can get a little annoying
General rating: Run of the mill platformer built using AGD, with very nice graphics

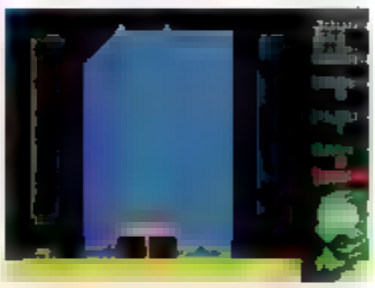




TERRAPINS

Publisher **Cronosoft**
Author: **Allan Turvey, David Saphier & Craig Howard**
Released **2017**

Based on an ancient and obscure arcade game of 1981 called *Turtles*, *Terrapins* is a search-and-rescue mission dressed up as a basic maze type game. The star is Mama Terrapin, and she's in a bit of a pickle (not literally, thankfully). Evil bugs have kidnapped her babies – the Kidterrapins – and scattered them around their eight-storey building. Taking control of Mama, the player must enter the building and retrieve her many brood, avoiding the devious bugs all the while.



To help her, Mama has a small selection of bombs which can be added to by walking over the star in the centre of each screen. These bombs are 'laid' behind Mama, and are useful when in a sticky spot. Once a baby terrapin has been discovered the little mite crawls onto Mama Terrapin's back, who must then be guided back to the exit, which rather unfairly moves around the screen after each rescue. Collect all of her family and Mama can finally return home, and presumably put her feet up with a nice

PENTACORN QUEST

Author: **José Ignacio Rodríguez (Nightwolf)**
Memory required **48K, 128K recommended**
Released **2015**

This is about acorns, not the ones loved by squirrels but golden acorns. There are five that could open a portal to... well, you know, a special place where, well... where anything could happen!

Pentacorn Quest (Penta, five; acorn, seed of the oak tree) is a platformer that plonks you firmly in the shoes of an unnamed adventurer setting forth to gather the legendary precious seeds and ultimately solve the mystery of what lies beyond the portal. As always, it's never quite that simple.

The many hazards and creatures out to stop you can be quite daunting, but thankfully a lot of care and attention has been given to the controls so that the adventurer proves to be an agile athlete, running around with precision. Many enemies populate each screen, waddling and scrabbling about, all intent on stopping the adventurer. Trying to figure out the precise time to make that leap to safety often means a pause for careful thought. The art of jumping is a pretty fluid affair with direction change in mid-air allowing for some quite spectacular manoeuvres.

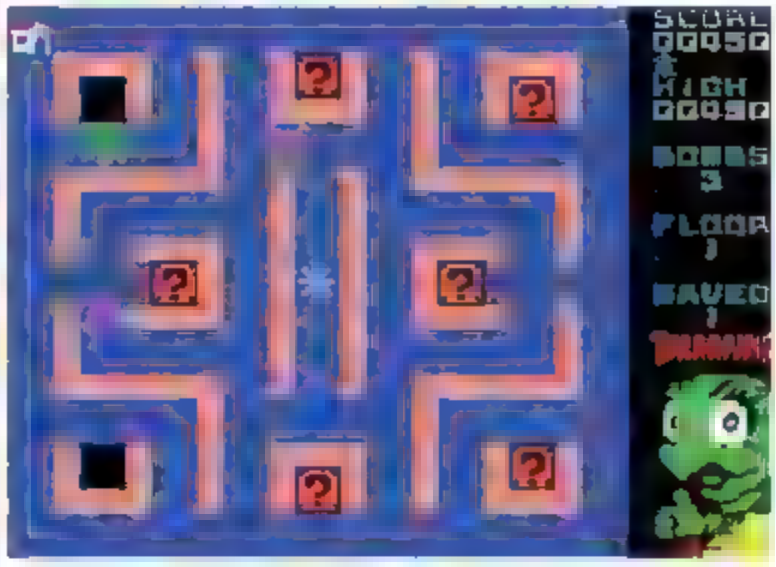
To help progress in the adventure, a number of items to pick up are dotted around the many screens – and part of the challenge is to know where and when to use them. Some are obvious, such as the pickaxe or dynamite; others

cup of whatever a terrapin's hot beverage of choice is following a difficult day.

CRITICISM

• The mazes in *Terrapins* look lovely, despite their basic nature. Mama Terrapin moves around well – fortunately much quicker than in the cute intro screen – but this is no easy challenge, the bugs pursue the faithful parent constantly – it's quite easy to get trapped in between two enemies and there never seems to be quite enough of the bombs to hand. It also seems a little unfair that after Mama's gathered up a Kidterrapin and heads for the exit that it moves around the screen after each rescue

While I have some doubts about its long-term addictiveness, *Terrapins* is a well-polished and undoubtedly fun



game to play and well worth looking at if you're after a simple arcade game to while away a winter evening or two.

Graeme Mason

CRITICISM

• This is an addictive game – however one in which the difficulty ramps up quickly enough to test one's patience. The premise of *Terrapins* is simple: explore the maze, dodge the nasty bugs and rescue each of your baby Terrapins by piggy-backing them to the little Terrapin house and safety. Get all your bijou Terrapinets home to clear a level. This is the kind of game where looks need to be functional, and in which gameplay rules, and that's what you get – a simple idea executed really well.

Chris Wilkins

COMMENTS

Control keys: Definable
Joystick: Any make
Use of colour: Bright, jolly
Graphics: Functional, with a nice start attract animation
Sound: Catchy AY tunes throughout and a little *Mr Do!* jingle as you die
General rating: Good implementation of a playable1980s arcade game, but perhaps lacking the addictivity for enduring play

Use of computer	86%
Graphics	90%
Playability	85%
Getting started	92%
Addictive qualities	85%
Value for money	N/A
Overall	86%

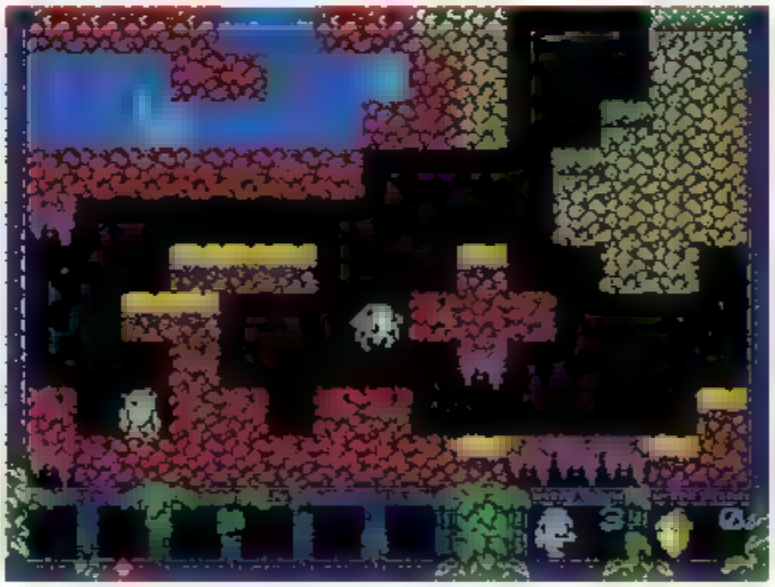
like the acorn seed present a more puzzling challenge.

On his dangerous travels, the adventurer can flick a number of purple switches, which change the world. It's not always obvious what they do when triggered and changes to the landscape can be quite subtle, so a good memory is a must for success. As ever, not all of these switches are easy to get to and involve some complex puzzles to solve to keep progressing

CRITICISM

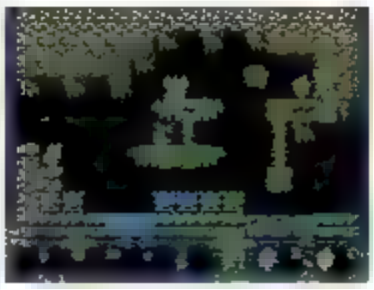
• While the controls are well balanced, using the joystick makes it harder to pull off some of the intricate jumps. A personal preference, the keyboard is a much more satisfying experience. The addition of items to help with some of the obstacles is a nice touch, but the solutions are not always obvious and a lot of trial and error is involved to figure out just what to do next.

Alan Hammerton



CRITICISM

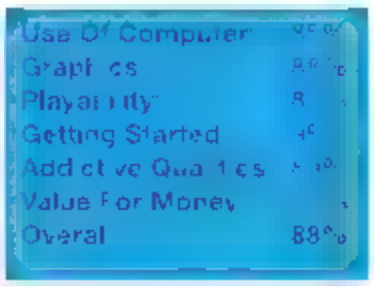
• This turns out to be a nice little game of busy screens full of cutesy colourful graphics. The character you control is a very capable acorn hunter, and considering his pixel height manages some gravity-defying jumps – and some death-defying drops. The backgrounds are lively and inventive enough to encourage exploration to see new rooms. The only gripe I have is that it's not obvious where the exits are on each screen due to a border graphic that covers them up. Apart from that, I strongly suggest you set off to collect the five acorns and solve what is beyond the portal.



Chris Wilkins

COMMENTS

Control Keys: Definable
Joystick: Kempston, Sinclair
Use of Colour: A very colourful world, but sadly with some colour clash
Graphics: Good screens and characters by Jarlaxe, influences from *Sabre Wulf* are apparent
Sound: Some jolly AY tunes throughout by John McKlain
Screens: 36
General Rating: A very playable little platform game, although it can be frustrating in places.



SNAKE ESCAPE

Memory required: 48K/128K
Language: **C z88dk (NIRVANA+ Engine)**
Author: **Einar Saukas**
Released: **2016**

It's no secret that the most addictive games are often the simplest and *Snake Escape* rams this concept home with some top-notch music, graphics and playability.

Written by Spectrum community stalwart Einar Saukas (using his self-developed NIRVANA+ engine), *Snake Escape* offers 42 screens of increasingly difficult puzzle-platforming with those highly respected coders **MmcM** and **BiNMaN** taking on the music and graphic designer roles respectively.

Based on Flash title *Lime Rick* (2013), Einar not only ported the concept to the humble Speccy, he managed to make it sound, look and play better than the original in every possible way. The rules are straightforward. You control a snake of unlimited length that can be extended vertically for a maximum of four squares. The snake cannot re-enter a square that it already occupies and gravity also plays its part. So, moving left or right extends you downwards if there's nothing to block your path. On each level you start off as an egg and your goal is to reach the fruit. The early levels ease you into the mechanics, eventually ramping up the difficulty and adding more features along the way. There's no time limit, so you're free to take as long as you need to think about your next move. If you get stuck (and it's an inevitability!) simply hit the fire button to reset the level.

CRITICISM

• The NIRVANA+ engine shines in *Snake Escape*; Einar has managed to push the limits of the hardware, resulting in the kind of colourful graphics never before imagined on the Spectrum. While there are no sound effects, the catchy title and gameplay music (on the 128K version) more than make up for it.

It's a pity that there's no means for you to save your progress, meaning a start from scratch every time you load the game. This isn't too much of a problem, with modern hardware solutions such as the DivMMC allowing for save-states or emulators allowing for snapshots, but for people playing on the original hardware it could become a burden. A simple option would have been the inclusion of a password entry system that would allow you to start on later levels. An even simpler solution would have been to add a level select screen.

Neil Ebrey

CRITICISM

• Remember that Snake game you played years ago on your Nokia phone – well this entertainment gives a huge nod and a wink to that gem and adds another layer of addictiveness and shine on top. The task is simple: start at position **A** and move the snake's head to position **B** to get at the fruit. Of course the challenge is to master the clever rules which constrain how you're allowed to slither

your reptile about. You soon realise that *Snake Escape* is not the arcade-themed *Snake* of old in which the high score was everything. No this is a puzzle game that forces much consideration of the route you must take and the moves required to get through the clever levels to the booty.

It all adds up to a very clever, fun game, one that gets hard very quickly as you move up through the levels. In the Nirvanna+ engine it looks stunning too and comes with a very catchy 128K tune. ***SMASH***ing!

Chris Wilkins

COMMENTS

Control Keys: Q, A, O, P (SPACE resets the level)

Joystick: Kempston Sinclair, Cursor

Keyboard Play: Preferred!

Use of colour: Incredible

Graphics: Amazingly colourful and bold sprites by Jarrod Bentley (BiNMaN) which work on the original hardware

Sound: Great 128K title and gameplay music No Sound effects

General rating: One of the best puzzle games on the Spectrum. Give us a password entry screen. Einar!

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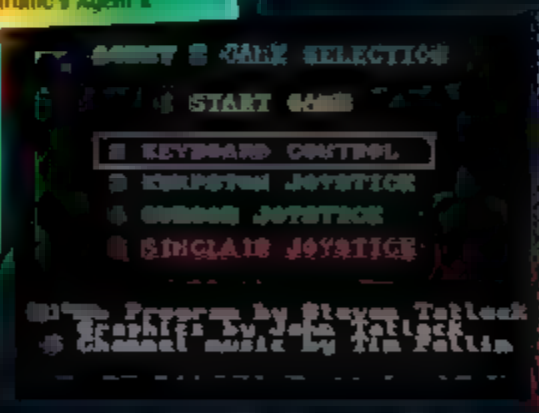
What the BEEP!

To quote the well worn, age-old cliché that everyone of a certain age remembers the day and where they were when President Kennedy was assassinated, for those of us of the 1980s home computer era, every ZX Spectrum owner I've ever spoken to remembers the day and where they were when they first heard one particular ZX Spectrum tune; *Agent X* by Tim Follin.

I certainly did. I couldn't believe the sound emanating from my humble Spectrum, it was a tune that made me look at the machine in a different way.

I'd listened in envy to the amazing SID chip music produced by a friend's C64 but *Agent X* was something special. A standout piece of music with a synthesized 3-channel sound unique to my beloved little rubber keyed computer.

Tim Follin and his standout music for Mastertronic's Agent X



This was a tune that not only pushed the boundaries of what was possible on the tiny inbuilt beeper but it was a fantastic composition in its own right – a 1970s style synth prog rock piece, perhaps with influences of early Genesis or Yes. Immediately I recorded it onto cassette tape to listen to again and again, as you did back in the day. It even prompted me to write my one and only letter to CRASH in 1986 to gush about it, just as I am now, 30 years later!

It turns out that Tim wrote *Agent X*, including the sound routines, while still at school and around 15 years of age... Wow!

Everyone knows the original ZX Spectrum's BEEP command and we all had a go at making single-channel BASIC beeper tunes in the early days. The more adventurous even wrote simulated multi-channel beep command tunes warbling between notes. The human ear then did a marvellous job of separating the channels. Things all changed around 1985, when an excellent music package by Mark Alexander called *WHAM! The Music Box* was released. This allowed synthesized 2-channel music with interrupting drum sounds to be produced easily and incorporated into your own programs. Many commercial games went on to use music written with this utility including *Fairlight*, *Gyroscope* and *Trapdoor*.

But it seems everyone has fond memories of beeper (aka 1-bit) music from different games they enjoyed such as the multi-channel tunes used in the Codemasters games or *Manic Miner*'s cacophonous rendition of *The Blue Danube* being particularly remembered. I honestly hoped that one day Tim Follin's own sound routines would surface and I would be able to create music with a similar synthesized sound. As it turned out I would have to wait nearly 30 years.

With the release of the Spectrum 128 and its AY sound chip, beeper music seemed to take a back seat as gamers enjoyed the audio delights of games such as *Zub* and *Thanatos* on their upgraded machines. Even though the focus had now shifted to AY chip music, people like Tim Follin, Ben Daglish, Lyndon Sharp and Jonathan Smith were still producing excellent beeper tunes and exploring new ways to produce multi-channel sound. The challenge to innovate and create impressive sound using basic hardware obviously remained a strong motivating factor.

New Beeps

As many people did, I left the Speccy behind around 1988 and moved onto the new 16-bit Atari ST. My 128K toast rack was sold (huge mistake) and my 48K rubber keyed machine unceremoniously forced into hibernation in the loft, not to be awoken until 2013. But I recently learned that through the late 1990s and early 2000s it was the Russians that helped keep the Speccy alive – clearly its popularity never waned.

For beeper music, activity began to resurge around 2006

The evolution of 'beeper' music on the ZX Spectrum

By R.Hollins

with thanks to Irrlicht Project

when a Polish musician called Mister Beep revisited his old Spectrum and began writing music again, initially using some of the old utilities from back in the day, such as *Music Box* and *Music Studio*. More about Mister Beep later on.

Around 2009 some of the old sound routines began to be extracted from *WHAM! The Music Box* and 1980s games such as *Hysteria* and *Ping Pong/Cobra* and incorporated into a new PC music package called *Beepola*, written by Chris Cowley. This excellent piece of software allows old-style beeper music to be written on a PC using a selectable sound engine. The compiled song (.tap) file can then be played on a real ZX Spectrum, incorporated into games or recorded as a .wav audio file.

At this point the 1-bit scene really started to take off. Spectrum sound routines became known as 'engines' and a musical genre born, ZX Beeper had arrived. *Beepola* began to be used extensively to create new Spectrum tunes and is particularly popular as a tool used by competitors in the American chip music site Battle Of The Bits. The ZX Beep chipmusic format being one of the most popular by regular participators of this chip music battle composition site.

Russian coder and chiptune musician Shiru had now begun to create brand new beeper engines with remarkable timbre such as *Phaser 1* which produces a C64-like synth sound with digital drums. As well as *Tritone* (3 channels), *Octode* (an 8-channel synth engine) and *Ochan* (a 4-channel Tim Follin sounding engine).

He also wrote a new PC music package called *1-tracker*, again allowing beeper music to be created, compiled and played back on real Spectrum hardware. This package included further extracted vintage engines such as those by Lyndon Sharp and even an early one by Tim Follin.

Both *Beepola* and *1-tracker* have continued to be upgraded over the years and new engines added as they've been created. Both packages have sparked the creation of hundreds of new beeper tunes using multiple sound engines and there is also a new package being produced called *Bintracker* by German coder and chiptune musician Irrlicht Project. This exciting new development incorporates all the ultra-modern beeper engines being produced and uses a scripted language to add new engines. Watch this space!

Albums

Yes, chiptune musicians are actually making albums of ZX beeper music in 2017. The most influential modern 1-bit ZX Beeper musician is undoubtedly Mister Beep and he certainly inspired me to become involved with the genre in 2013, as had Irrlicht Project in 2007 and French chiptune musician Garvalf later, in 2014. After Mister Beep started writing music again in 2006, he created compilations to be played on real Spectrums. He then began making recordings from real hardware (recording the output from a Spectrum's mic socket) and released albums (currently around five) of his ZX Spectrum music in MP3 format.

I first discovered Mister Beep's music on a 1-bit blog by Shiru in 2013, and his albums are available to download from there. Shiru's blog really is a mine of information about 1-bit music for both the PC and ZX Spectrum and goes back years. It's probably the best resource for the subject on the net.

The more of Mister Beep's albums I downloaded, the more I began to appreciate the 1-bit music genre and the more I wanted to create beeper music myself again, just like I had 30 years before. From his SoundCloud site Mister Beep's fascination and enthusiasm for 1-bit music and the ZX Beeper genre is obvious. 'My musical beginning was in mid-1980s, possibly a bit later, maybe 1987, I cannot remember so well, as I was a child back then,' he says. 'I was making synthetic music (chiptunes) on a Spectrum 48K (not mine – borrowed). At first I was just typing BEEP commands in BASIC but later I was using mostly the *Music Box* editor (as it was the only reasonable choice then, if not the only).

'Then I thought everybody had forgotten about Spectrum machines. However, in 2006 I got back to the Spectrum. To

be exact, I got back with its American/Portuguese clone, my beloved Timex Computer 2048 (a clone of the Spectrum 48K), and that's how I started to make ZX music again. I record my chiptunes and digital songs from real hardware every time. No emulators! Since 2006 I have published several albums.

'So, as you have probably already figured out, I make micromusic/chiptunes, but it's not typical micromusic. As opposed to 16-bit chiptunes (PC), 8-bit chiptunes (Amiga) and 4-bit chiptunes (Atari XL, ZX Spectrum 128K, C64), I make ONE BIT music using the mentioned Timex 2048 and its BEEPER. The beeper sound is generated by its Z80 chip which is, with the help of the ULA chip, the sound source of the Spectrum/Timex hardware.

'By default, the machine has only one channel of square-wave 1-bit sound but with software mixing the Spectrum

What the BEEP!

43K has finally from 2 to 9 channels, various modulations and envelopes, drums and noises, digital sound, speech synthesis, and volume, etc. (It's impossible to make various volumes in 1-bit sound actually so even this is impressive.) Still only 1-bit of course. I could say that everything mentioned above is theoretically impossible to make on this computer. But... it still works!'

Of Mister Beep's albums the one that impresses me the most is his 2011 seminal work *A Thousand Furious Bees*. I love the sound of this album and the extraordinary fact that it actually uses multiple synchronised Spectrums to produce 6- and even 9-channel music.

Some of the tracks written specifically for synchronised Spectrums use the extracted *Special FX* engine with mixed stereo while others use Shiru's 8-channel Octode engine. As the title suggests, all the tracks revel in the sound of a swarm of synthetic bees; a true masterpiece of the genre.

A quick count reveals there have now been at least 14 other ZX Beeper albums produced since 2006 from chiptune musicians including Voxel, Mister Beep, Imlicht Project, Garvalf, Tronimal, AER and Tufty and at least two more are currently in production. Some of the album titles include *Dat Fuzz*, *One Myth*, *1-bit Mechanistic* and *Chromospheric Flare*.

While researching this article I asked various members of the 1-bit community for their thoughts on 1-bit ZX Beeper music. Garvalf is clearly very passionate about the genre. 'There are certainly several aspects I enjoy in beeper music,' he told me. 'First, the fact that it's historically one of the first [types of] computer-generated music, during the 1950s. When the sound is so simple or raw, you only get the essence of the music. What is nice when you listen to it is how the assembly of those notes flatter your spirit, it's not some easy-listening music, for sure. Music for the mind.

'Second, some clever people improved the original sounds with new routines, which instead of just making the beeper beep, make it sound more interesting. Then the beeper can become also a kind of synth which can fully enter the electronic music realm.

'And third, last but not least, the harsh and sometimes saturated sounds of beeper remind me of some metal music, which is one of my favourite musical styles. I also enjoy baroque music, and some harpsichord pieces are not that far from 1-bit music: sharp sound, no volume variation...

'When it comes to composing music for beeper, there are great benefits: you only have to choose the engine, and stick to it. It's the idea developed in the first point above: you only have to deal with the notes, and not with the sound, the creation of the instruments, etc. In modern electronic music, you have so much choice that it's overwhelming, and you don't always make coherent choices, unless you're a professional or very good musician. In chiptune music the

The evolution of 'beeper' music on the ZX Spectrum

limitations can boost your creativity and in 1-bit music, it's even more the case.'

Shiru was equally enthusiastic and thoughtful. 'Beeper music first hooked me up mid-1990s, when it was an obsolete obscurity already. Its rough, buzzing, crackling, rocking, humming sound in *Ping Pong*, *Fire Fly*, *Midnight Resistance*, *Chronos*, *Agent X* and many others, somehow managed to stand on its own against much cleaner sounds of the Spectrum 128K, NES and Genesis, teasing my imagination and developing admiration of what talented people were able to pull out of this basic hardware.

'A supposedly brief nostalgic comeback to beeper music in 2009 turned into an ongoing journey into the terra incognita of numerous possibilities of 1-bit sound synthesis. Years later, it still amazes me how many wonders can be done with just a few dozen bytes of a cleverly designed sound generation loop. I think the key appeal of beeper music is its unusual timbres, sound diversity, and charismatic imperfections.'

In 2013 Irrlicht Project and Yerzmyey created the 1-bit forum as a single place on the net to channel the escalating enthusiasm for 1-bit and ZX Beeper. It is a friendly, welcoming place to discuss ZX Beeper engine coding and show off works. There is a relatively small band of enthusiasts but every now and again someone new will stumble upon the forum, wander in and display the kind of enthusiasm described above.

Jan Deak

When in 2014 Jan Deak passed away the 1-bit and Spectrum scenes sadly lost one of the greatest ZX Beeper coders. Jan was very active over the years and produced many excellent beeper engines. The last engine he produced was called *ZX16* and currently holds the world record for the Spectrum engine producing the most channels: 16 from a single beeper. Using the pin pulse technique, the sound output can be very ethereal and church-organ-like, punctuated with 1-bit artefacts that make the sound even more interesting.

Chiptune musicians from the 1-bit forum created a tribute album using Jan's engines, which included the *ZX16*, and the piece titled 'Crystal Realm' is truly amazing. It's an inspired piece with a sublime roar of the Beeper, ethereal and spiritual with an ending reminiscent of Ennio Morricone; a fitting tribute. RIP Jan

The Future

In 2016 ZX Beeper tunes were played on several chiptune radio stations around the world and included on the UK show *One Life Left*, German radiocast Vdrwn and Canada's Le Mathieu Plante Show.

Beeper goes from strength to strength with a dedicated band of enthusiasts regularly creating new engines and exploring new methods of synthesis and sound generation. Irrlicht Project (utz) has been extremely active over the last few years and has produced a multitude of jaw dropping engines including a 3-channel digital mod player (*zbmod*), advances into the phased sound techniques developed by Shiru (*Phaser X*), *Squeaker Plus*, experiments with triangular waves (*Pytha*) and three new variations of the *Octode* 8 channel engine. In 2016 he even set himself the task of creating and presenting seven new engines in seven days, the results can be heard on his outstanding Soundcloud site.

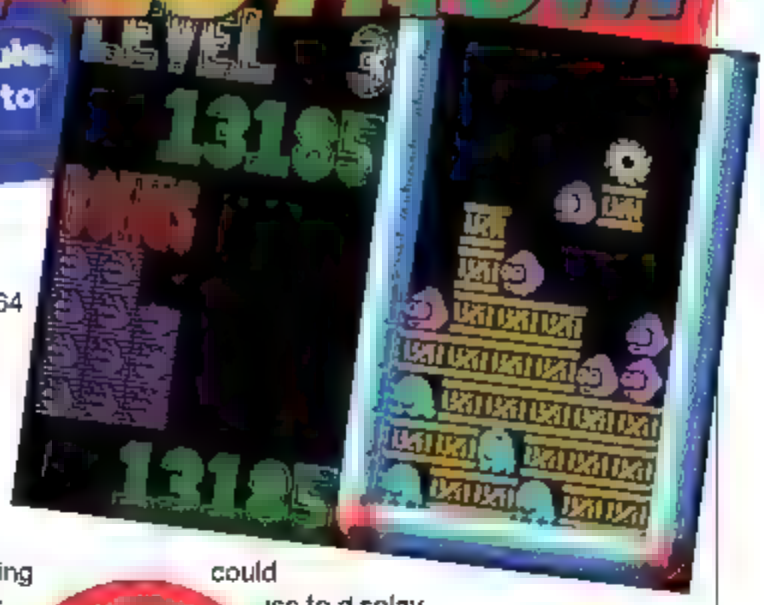
I recently asked Irrlicht Project (utz) how he first got involved with the 1-bit scene and why it interested him. 'I got into beeper music at the end of 2007, after discovering Mister Beep's stuff,' he told me. 'Did my first steps in assembler in 2012, porting the *Huby* engine to the HI-82 graphing calculator and wrote my first beeper engine in 2013. There are mainly two things that fascinate me about beeper music. First, there's the unique sound of it. To a casual listener it might appear utterly basic and crude. But if you listen more carefully, you can hear that it is actually very rich and has an incredible harmonic depth. The second thing is that the minimalism and tight restrictions that come with beeper music help me focus, which consequently gives a lot of artistic freedom. The same goes for creating engines, it's simply very liberating to create something from nothing. It's like drawing a picture with just a standard household pencil and a blank sheet of paper. With coding engines, there's also the feeling of being an explorer in uncharted territory. There are a lot of things to discover that no one has ever seen – or rather, heard.'

Clearly 1-bit ZX Beeper music is a lot more than just nostalgia to some people. It's a valid musical genre on the fringe of chiptune and the ultimate in Lofi while essentially an on-and-off signal to a speaker.

The Beep Goes On!

CRASH THE FULL SPECTRUM

Two colours per character space. That's the rule. But rules, as JASON RAILTON says, are made to be broken. But how? And why only now?



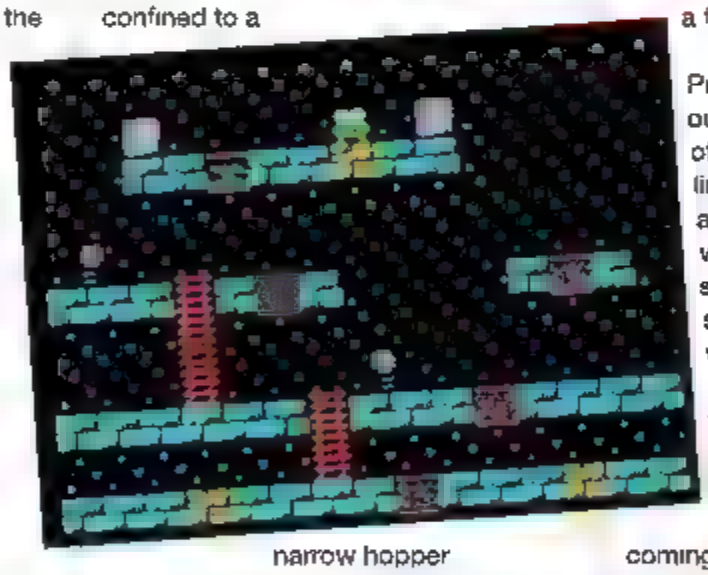
To trace the origin of these graphics that seem so impossible on our beloved Spectrum we have to go back to a time when Sinclair was still in black and white. The Atari 2600 had colours – over a hundred of them – but could only display a few at a time. Canny programmers learned to change the background colour of the screen while the TV was still drawing it, and so produce bands of different colours.

Andrew Braybrook taught the Commodore 64 similar tricks for the titles of his hit *Alleykat*. But it was Hewson's Dominic Robinson, converting Braybrook's *Uridium*, that first implemented the technique on the Spectrum – adding a pulsing logo to the title screen. He later gave a better demonstration with a type-in called Rainbow Processor in the August 1987 issue of *Your Sinclair*. Even so, the Spectrum was limited by how many character cells it could recolour on each line, so the effect was limited to a column in the middle of the screen.

And that was about it – it stayed a title-screen effect, never appearing in actual games. The problem was, it took so much processing time just to maintain the effect that there was little time to move a game around. And games at the time were constantly trying to mimic the latest arcade hit, with full-screen scrolling and ever-larger sprites. I had the opportunity to ask Andrew Hewson if they had ever considered doing any more with the technique, and he said they simply wanted to replicate those C64 title screens.

Now we are Retro

Fast-forward to 2009 and the subject came up again on the World of Spectrum forum. I was getting into retro programming and looking for a project. As a youngster I had wondered what games could take place in a narrow multicolour column, but now I had the answer – a block puzzle game was the perfect solution. Few moving objects, and everything confined to a narrow hopper.



With some tips on multicolour demo programming from Matt Westcott, I released my own demo of some sprite graphics, and started making them move. While I dallied, Andrew Owen released some code he called the *ZXodus Engine*, that any programmer could use to display multicolour graphics tiles. And John Young was doing exactly that, working on a shoving-blocks puzzle. Suddenly the race was on (at least in my mind!) and *Buzzsaw+ (Foxton Locks Mix)* was released in October 2011, with a finished Bozxle appearing from John a few weeks later.

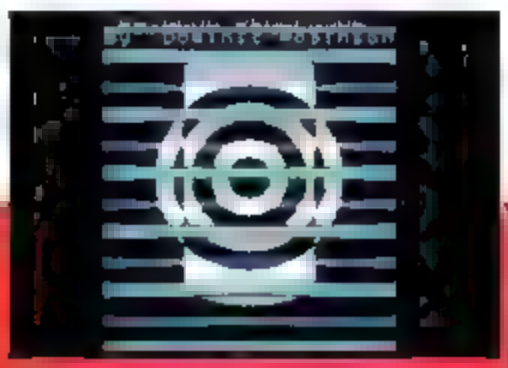
After that, things really took off. Programmer Einar Saukas figured out how to recolour an entire row of the Spectrum's screen over two lines of the TV picture. His *Nirvana* and *Nirvana+ 'Bicolour'* Engines were able to draw tiles and moving sprites anywhere on screen. Games still had to be kept to single screens with a small amount of movement, but Dave Hughes excelled at this with games like *El Stompo* and *Sunbucket*.

And now with easy access to Einar's code, the games just keep coming. Puzzles remain favourites to keep the animations simple, but that needn't hold a game back. Take a look at Denis Grachev's *DreamWalker* or *Multidude* and Einar's own *Snake Escape*. And what next? Is this as far as anyone can push the Spectrum?

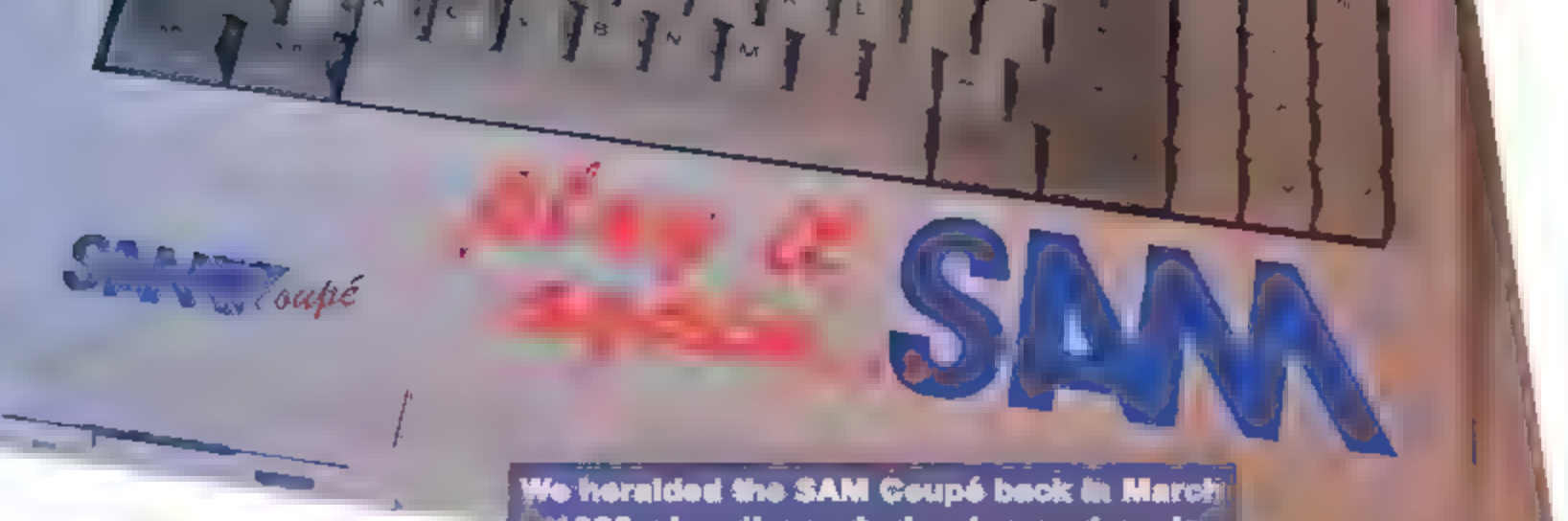
Don't be daft...

Fantastic, animated Mode 2000s-esque on Activision's fiery sunset effect.

The title screen of Spectrum Unlocked shows us the beginnings of multicolour.



Nirvana+ Bicolour's Rainbow Processor shows off its trickery.



We heralded the SAM Coupé back in March 1988 when the early development work was made public. Here, veteran SAM Coupé developer COLIN PIGGOTT offers a quick catch-up on what happened to the SAM after CRASH left the building.

Even as Alan Miles and Bruce Gordon of Miles Gordon Technology (MGT) developed add-ons for the Spectrum, they had higher aims: to create a new computer to go head to head with the Atari ST and the Amiga, but at a fraction of the cost.

CRASH broke the news of the 'cheap Spectrum clone' SAM Coupé in Tech Niche in February 1988 (issue 50). More articles followed as the early specifications of this powerful new 8-bit microcomputer grew, until its eventual release in December 1989.

Powered by a 6MHz Z80 processor the SAM was offered with either 256K or 512K of memory and had an advanced BASIC built into its 32K ROM. At the heart of this, Bruce Gordon's custom ASIC silicon chip provided core functions such as advanced graphics, MIDI and memory control. More importantly, the SAM offered 48K Spectrum compatibility via emulators, although this led to the SAM being dubbed a 'super Spectrum' and its true capabilities were often overlooked. To make matters worse, despite initial interest, very few software houses took the gamble of developing for the system.

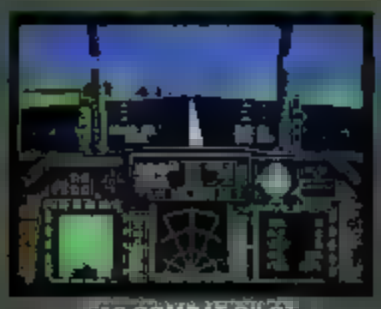
Several hiccups marred the SAM launch late in 1989: the disk drives were not ready and the ROM contained several major bugs prompting MGT to release two updates. In less than a year MGT went bust. However, within a short space of time Miles and Gordon raised sufficient capital to buy back the assets and form SAM Computers, or SAMCo as it became known.

Through the enthusiasm of writer/editor Nick Roberts (of 'Playing Tips' fame – *'who he?' —Ed*) CRASH continued to feature the latest hardware and software releases in the SAM world and things looked good. However, behind the scenes SAMCo was faltering. The company ceased trading two months after CRASH's demise in April 1992. Although it was game over for MGT, the SAM lived on with peripherals manufacturer Blue Alpha Electronics, which took over production for a while and it was during this time, in spring 1993, that I bought my first SAM Coupé, a decision I have never regretted!

However, Blue Alpha was just a stop-gap until a new company called West Coast Computers was formed to carry on building and selling the SAM Coupé. West Coast updated the computer's image under the new name of SAM Elite. The 'improvements' – a built in printer interface, a tweaked ROM, and sticky labels covering the old SAM Coupé logo on the case – failed to impress fans, who still refer to them as SAM Coupés. West Coast Computers carried on making SAMs available up until 1999 when it abruptly ceased trading. These were dark times for the SAM.

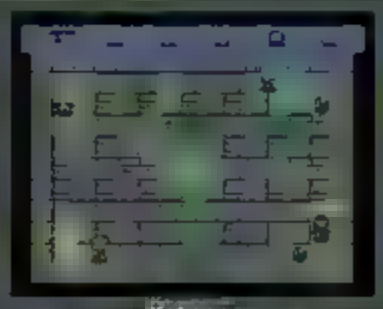
However, I carried on having started my own SAM company Quazar in 1995 with the release of a multichannel digital soundcard and plenty of software to support it. The SAM really benefited from the support of a variety of magazines, fanzines and disk magazines throughout the 1990s, including the likes of *Fred*, *Format* and *SAM Prime*. In 2002 I launched my own title, *SAM Revival*, which is now the only exclusively SAM magazine still publishing. *SAM Revival* is a printed magazine, with bundled disks featuring both old and new software. So the SAM – in spite of its computer underdog status – has always enjoyed a fantastic user base, and with that strength it continues to this day. Here's a quick look at what's going on right now.

LOST IN THE DISK BOX: THE GAMES THAT NEVER WERE

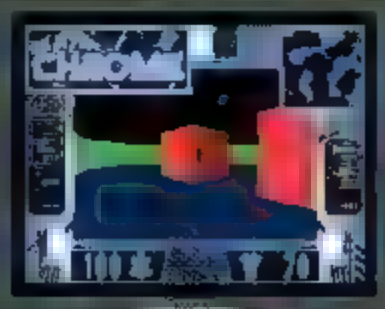


F16 COMBAT PILOT (Digital Integration)

Sandman's Shadow (Gordon Wallis)



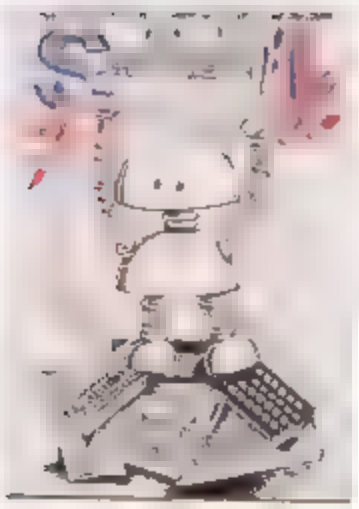
Kaboom (Wayne Coles/Fred)



Chrome (Colin Piggott/Quazar)

As with any home computer there has been a large number of games announced for the SAM which ultimately were never completed. CRASH featured the demo of *F16 Combat Pilot* on the covertape back in 1992, but sadly the full version was never published. Other notable titles include *Sandman's Shadow* which would have been a complex point-and-click adventure, *Kaboom* was a *Bomberman*-style game and *Chrome* was my own attempt at a 3D shooter.

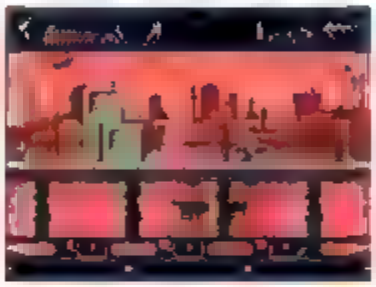
play it again SAM



GAMES IN DEVELOPMENT

With ***CYBERNAUT***, Andrew Collier is resurrecting an old game worked on more than 20 years ago. *Cybernaut*'s concept as the name implies, is in the style of *Cybernoid*. Using the original graphics created by a programmer known as Silver Sword, Andrew is writing from scratch, using some very clever techniques to ensure the game appears to run at a constant rate, no matter how many sprites are being updated on screen.

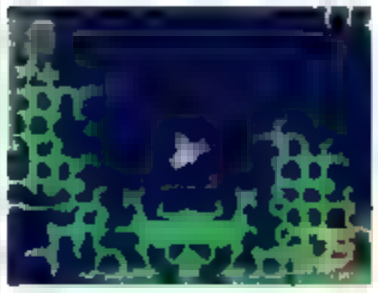
Science fiction? Check! Aliens? Check! Velociraptors? Check! ***INVASION III*** has all the ingredients you need for a gripping action game on the SAM Coupé! Warren Lee is back working hard on the third instalment of his Invasion game franchise. Combining platform action and puzzle solving he's onto a sure hit!



While it does not have the most imaginative game title going ***DUNGEON GAME*** is the latest in development for the SAM by Rob Evans. Inspired partly by Atari 2600 games in terms of having the same set of graphics but changing the palette between levels, and utilising the shoot-em-up style of *Robotron*. *Dungeon Game* is fast-paced as you defeat the swarming enemies attacking from all directions in the randomly generated mazes. Looks fun!

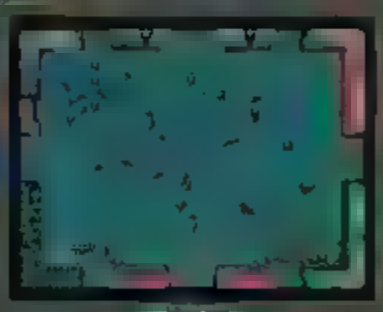
It's horizontal shooter time for SAM on ***SPIKER 2***. After their recent batch of SAM games, the Blackjet guys are hard at work on this next release, a sequel to their earlier Spectrum game.

Anton Javorcek (the demoscene's Antory/DTA) recently revealed the work underway on his new game ***STARDUST SPECIAL MISSION***. It features a huge, scrolling play zone and reminds me a lot of the ZX Spectrum game *Firefly*. Currently utilising external memory packs to give a fast memory boost, it may be out of reach of the average SAM user but I hope by the time it's finished it'll be adapted to use just the internal memory. Looks stunning when in motion.



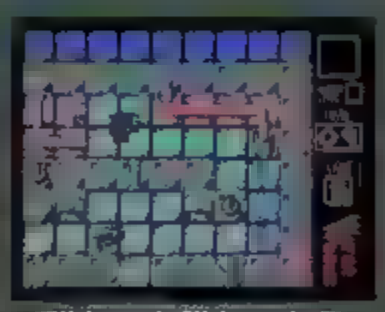
CELESTE ever heard of the Pico-8? It's an imaginary console! To explain, it's a new 'retro style' system that only exists as an emulator! A hard concept to understand, but SAM coder Howard Price has started work converting one of the games from the Pico-8 to the SAM. Howard has lots

Stratosphere (Quazar)



Exodus (Apex Developments)

Lemmings/Oh No More Lemmings (Fred Publishing)



Waterworks/Waterworks (Fred Publishing)

Despite being shunned by all the major games companies which were producing 8-bit software at the time, the SAM Coupé still enjoyed a wide range of games. Its CRASH licensed games such as *Manic Miner* and *Prince of Persia* received rave reviews – 92% and 96% respectively. Further licences were obtained, including *Lemmings* and *Oh No More Lemmings*. Both used graphics from the Amiga version and really showcased what the SAM was capable of. But where SAM games really excelled was in new, original games written specifically for the SAM Coupé.

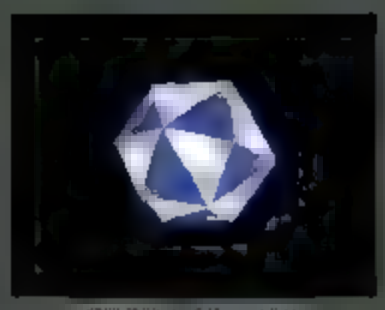
Amalthea (Jupiter Software)

Conquest (Hydrasoft)

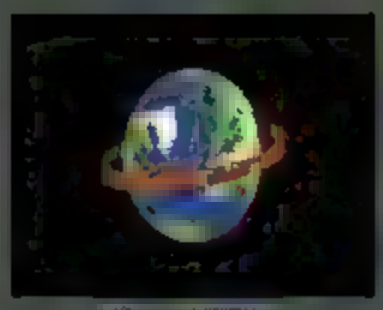
Booty (Jupiter Software/Phoenix)

Defender (Chris Pile)

Back to the Past (Sir David)



Defender of the 8 Bit (Antony / DTA)



Stars and Sprites (Andrew Collier / Mnemotech)

Music Experiment (Antony / DTA)

The SAM Coupé continues to have an exciting demoscene with the quality of graphical effects and music increasing every year. From voxel landscapes, texture-mapped tunnels, shaded vectors and plasma effects, the skills and enthusiasm of SAM programmers continues to reach ever greater heights.

of other projects on the go, another is converting the pioneering 8-bit classic ***THRUST***,

as well as working on music software making use of my SID Soundchip Interface that connects the Commodore 64's famous sonic chip to SAM.

A SAM Dizzy game? You better believe it! Rumours of an official Dizzy SAM conversion of *Treasure Island Dizzy* date back to before the launch of the system, with a resurgence again in the mid-1990s that never progressed into anything tangible. Now Adrian Brown has taken up the challenge and is well on the way to completing a conversion of ***TREASURE ISLAND DIZZY*** He's incorporated the

Amiga graphics and room layouts to push what the SAM can achieve. And with David Sanders on board as musician there's already a new six-channel version of the 128K ZX Spectrum music playing away in the background. If that's not enough, Adrian has also been working on a SAM conversion of the ZX Spectrum game Down To Earth, and has also been writing internet code for use with my Trinity Ethernet Interface to get the SAM functioning online.

[redacted]ENTS

It's been over 23 years since I started producing SAM Coupé hardware and software as Quazar. Here are some of my projects on the go.

Game – AMALTHEA II

Jupiter Software had originally planned a sequel to their hit *Amalthea*. Unfortunately, work only progressed to a small playable demo before work stopped. Time damaged the disks so all that survives are

three screenshots. I bought the rights to Jupiter's old software and I plan to start from scratch with my own vision of

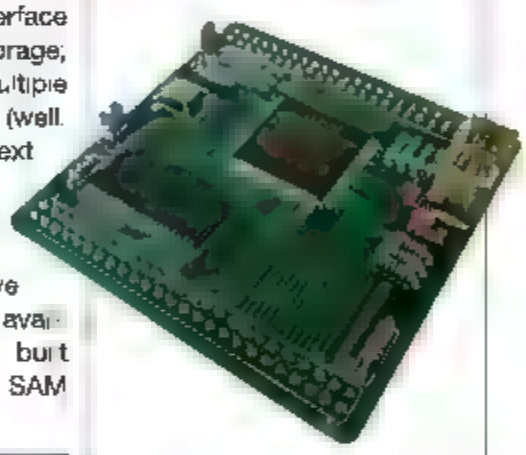
Amalthea II to keep the franchise alive. Plus their old software will be made available again on cover disks of *SAM Revival* magazine.

Hardware – SAM IN A CAN 2

Imagine a SAM Coupé recased in a stylish aluminium case, packed with all of the Quazar hardware goodies. Trinity Ethernet Interface with SD card mass storage; a sound card to add multiple channels of digital sound (well, a lot more – see the next release below); a PC keyboard and mouse interface; floppy drive. It's the ultimate SAM! Five SAM In A Can 2s will be available in the near future, built using salvaged original SAM Coupé motherboards.

Hardware – SYMBIOTE

The next major hardware project I have in development. The Quazar Surround sound card launched in 1995 has been crying out for an update and after a few design iterations it's now based on hardware designs developed in 2004–2006 (part of a concept for a new SAM). Symbiote is essentially a SAM co-processor offering 8 digital-to-analogue sound channels, several megabytes of memory, with the core centred on a Zilog eZ80 processor, running at 48 MHz, which due to the far superior architecture gives the equivalent of up to 32 times the processing power of the SAM Coupé's 6MHz Z80 CPU.



Symbiote will offer full backwards compatibility with the original Quazar Surround when running in legacy mode, but will be light years ahead when running its own native code, both for sound generation or other processing on behalf of the SAM.

So, there it is – exciting times ahead in the Sam Coupé scene!

Colin Piggot may be found at www.samcoupe.com

play it again SAM

LLOYD MANGRAM'S HALL OF SLIME

All cheats take note – for months now I've been sharpening the Blade of Fear and tightening the Noose of Terror for this special HALL OF SLIME. This is the page that prints the truth†, the whole truth, and nothing like the truth – a page of wholesome gruesomeness the like of which Mary Whitehouse†† has never seen. But enough of my wittering, let's get on with the scores...

LLOYD MANGRAM

Tapper 84,900 on Easy
Wizard's Lair 119,280 (50%)
Jetpac 176,300
Skool Daze 30,510
Atic Atac completed 99%
— **Andrew Baker**

Skool Daze 7,450
Mugsy 72%
Chuckie Egg 271,300 Level 24
The Hobbit completed
Kung Fu black belt Level 7
Kokotoni Wilf completed
Moon Cresta 29,450
Airwolf 2 scientists
Danger Mouse In Double Trouble World saved 6 times
— **Stan Alexander**

Beach Head 101,700
Pyjamarama completed 92%
Jetpac 4,750,050
Ghostbusters 70,200
Spy vs Spy 8,902
Battlecars circuit in 1,304
— **Jolyon Hogarth Scott**
Lloyd, can I have T-shirt for my birthday?

Alien 8 17 chambers
Bruce Lee 677,550
Spy Hunter 1,000,160
Lords of Midnight completed
Shadowfire completed
— **Chris Ford**

Underwurlde completed
Knight Lore completed
Manic Miner completed
Star Force 490,000
— **Jason DeCat**

Urban Upstart completed
Pyjamarama completed
Chuckie Egg Level 21
Hypersports Swimming 25.9, Skeet 9,200, Horse 9.99, Triple Jump 16.46, Weights 195kg, Archery 4,200 *(my sister scored 9,999 at Archery)*
Stephen Cheatley
Interesting surname there, Steve!
–LM

Everyone's a Wally completed £2,740
Alchemist completed
Tir Na Nog completed
Match Point won all levels
Jet Set Willy 66 objects
Ant Attack 4 girls
Jungle Fever 868
Cookie cooked one cake
— **Matthew Edwards**

Everyone's a Wally £650
Starstrike 1,310,100
Knight Lore 55%
Underwurlde completed
Finders Keepers £758
Bruce Lee completed 5 times
Spy Hunter 61,950
— **Simon Myszko**

Pyjamarama 87%
The Hobbit completed
Match Day won on all levels
Zombie Zombie 24,141
Pinball Wizard 35,785
Full Throttle 1st on Damington
Trashman 11 bins
Skool Daze 21,340
Football Manager completed
Maziacs completed all levels
Alien 8 20 chambers
[redacted]
Ad Astra time: 28.44, score 5,190
Wheelie reached nightmare park
— **Geoffrey Riley**

† Pages can't print! — Barnaby Page, Lower Crash subeditorial child

†† No, not the band! The campaigner for wholesomeness, see: https://en.wikipedia.org/wiki/Mary_Whitehouse

Grand National 100pts £999,999 after 19 races
Mazeman 16,090
CDS Pool 1,090
— Stephen Raven

Jetpac 131,275
Bruce Lee 2 128,925. completed 30 times (I didn't cheat)
— Robert Doole
Says you! **— LM**

Wizard's Lair completed 98%
Tapper 284,725
Chuckie Egg 274,300, Level 24
Chuckie Egg 2 1 egg delivered, score 244,484 with 7 men remaining
Pogo 136,475, level 16
Tir Na Nog completed
Beach Head 108,000 completed
— Robert Tandy

Starstrike 2,306,210
Hunchback 1,090,230
Jetpac 1,050,105
Knight Lore completed 84%
Underwurlde completed 90%
Booty completed, gold key
Ghostbusters completed $90,003
Pyjamarama completed 72%
Atic Atac completed 90%
Wheelie Level 3
— Paul Hings

Bugaboo 59 seconds
Pogo 104,000
Beach Head 143,300
Chuckie Egg 532,690
Skool Daze 14,320
Technician Ted 13 tasks completed
Pheenix 78,235
— Sean Rowe
Sean says his Mum did Oracle's Cave by herself because she's 'a bit of a dragon

Match Point beat all levels
Underwurlde completed with 24%
Match Day beat all levels
Monty is Innocent completed
Starquake completed 49%
— Tim Parsons

The Way of the Exploding Fist beat 10th dan 6 times
Factory Breakout completed
Hypersports gone round all events 5 times
Frank Bruno's Boxing beat 5th fighter
Starquake completed 32%
— Karl Tunnicliffe

Bruce Lee completed 17 times
Sabre Wulf completed 82%
Spy vs Spy Grand Master
Nightshade 27%
Airwolf 3 men saved
— Oliver Dyer

Jetpac 89,763
Frank Bruno's Boxing Andra
[redacted]
Exploding Fist 10th dan
Knight Lore 8 charms
— Lee Hodgkiss

Arnhem Germans lost 77 units.
[redacted]
Highway Encounter 33,120
[redacted]
Death Star Interceptor 23,000
Deathchase 3D 132,951
Match Day Scotland 17 England 0
Spy Hunter 167,260 (Expert)
Nightshade 50,000
— John Bannerman

Jet Set Willy solved
Monty On The Run 4,200
Everyone's a Wally completed £2,790
Head Over Heels 88%, 5 crowns, 258 rooms
— Lee Gregory

Manic Miner completed without cheating, aged 10 (never accomplished since in 33 years of trying)
— James Thompson

Cauldron 7,320
— Rob Millward

180 beat Jammy Jim
Atic Atac completed
Elite Deadly
Starstrike 2 completed
Sabre Wulf 3 amulet pieces
— Mat Dolphin

ATV 10,940
Fast Food Dizzy 1,674
Daley Thompson's Decathlon
Day 1 - 23,392
Day 2 - 80,306
Paperboy 21,340
Kwik Snax 12,500
More practice required'
— Dave Finney

Rainbow Islands Round 11 – 524880 (died doing the screengrab!)
R-Type Level 3 – 082200 (big ship thingy killed me)
Ghouls 'n' Ghosts 34750 (big maggot worm thingy killed me)
— Dean Woodyatt

I, of the Mask 50,567
Sabre Wulf completed 145,630
Atic Atac complete 47%
Jetpac 60,145
Max Headroom complete (03,48)
Frankie Goes to Hollywood complete (99% real person)
— Neil Kenny

Marsport complete
Light Force 747,300
Sweevo's World completed
Knight Lore completed 87%
3D Starstrike 113,9400
— Andrew Kenny

The Way of the Exploding Fist 106,200
Barbarian 30,850
Trashman 9,450
Chuckie Egg 195,080
Wheelie 6,297
— John McDermott

PREVIEW

Coming soon to a Spectrum near you!

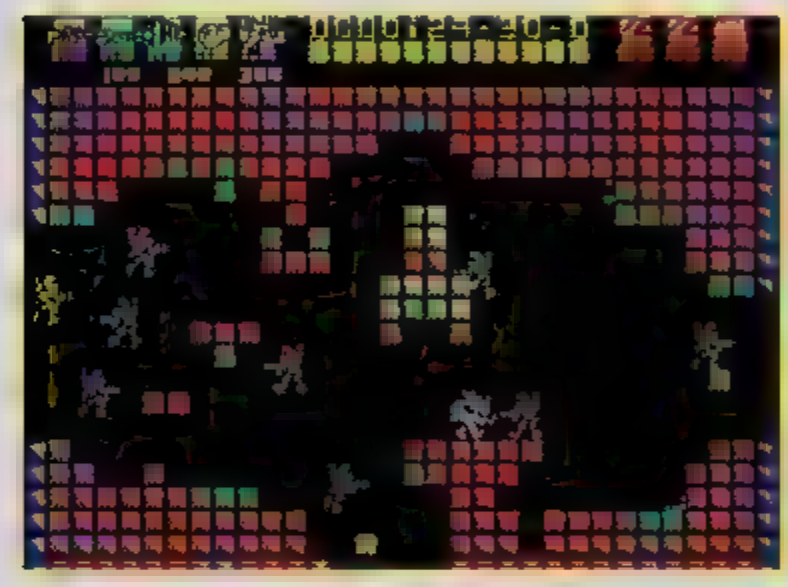
Rex – The Next Chapter

by Jas Austin

For a long while I've toyed with the idea of some kind of ***Rex*** remake, sequel or even prequel, but could never decide on a suitable platform. Rewinding back to 2016, fellow game developer Byron Atkinson-Jones mentioned my name to Henrique Olifiers, who at that point was just starting to talk about the ZX Spectrum Next. Luckily for me he and Victor were fans of my work, so they provided me with one of the early prototype boards. It was then clear that the Next would be the perfect machine for my new version of ***Rex***.

Coding with Z80 again, something I'd not done for over 20 years, was like slipping on a comfy pair of slippers. All my old know-edge came flooding back, and with the help of Steve Clark – genius coder and fellow Spectrum fan helping with some tools – I started development on PC running *Microsoft Visual Studio*, plus an emulator and the Next board, for testing.

It's still quite early days, but I've got most of my core functionality working display, sprites, etc.; and I've been able to pull Dave Dew's graphics from the original game. I'm designing on the fly, currently planning on creating a traditional Spectrum-style game, using the additional power of the Next for some enhanced features. All this in spite of not knowing exactly how ***Rex Next*** will turn out come 2018.



▶ *Rex* display test screen, and ▼ sprite code.

Time to re-do Mr. Do!

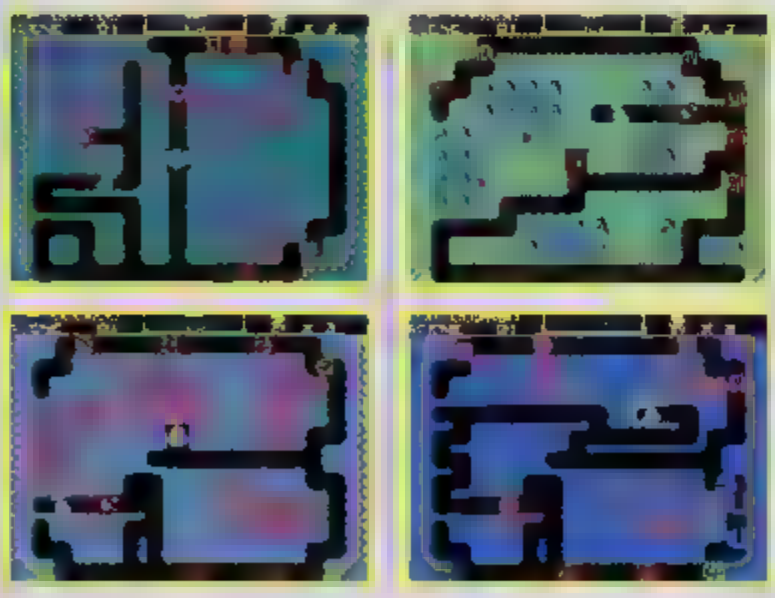
by Mark Jones

I found my old school friend Adrian Singh, on Boxing Day 2016 via Facebook. We met way back in 1979, and while I was working at Ocean he was studying and, in his spare time, writing pokes for Sinclair User. Then we lost touch in the mid-1990s. A few months ago I saw a post on Paul Hughes's Facebook newsfeed that concerned the source code to his and Jonathan Smith's Gameboy conversion of ***Mr Do!*** being available to download.

I had no idea that Joffa or Paul had written this for Ocean in 1991 so I fired it up on an emulator and discovered a great – lost, to me anyway – Joffa game I knew nothing about. As I played I wondered why no one had done a Spectrum version and that, should the chance ever come up, I'd love to be involved in producing the graphics for a conversion.

I'd just started emailing Adrian suggesting we do a Spectrum conversion of ***Mr. Do!*** when an email popped up from him. To my amazement he suggested what I was about to suggest to him. Simultaneously and independently we had both thought of a ***Mr Do!*** Spectrum conversion.

This was all way too bizarre to be a coincidence so I immediately accepted the challenge. As well as being a fun thing to do we could at last put that wrong to right and get a game done with Adrian as the author. ***Mr Do!*** isn't that complicated and should be a suitable candidate for his first full game.



▶ Screens from the Spectrum version of *Mr Do!*

The next day at work I remembered how I'd always thought it a great shame that Adrian hadn't put his coding knowledge to use by writing his own game. I was always certain it was well within his capabilities. Suddenly, it all fell into place.

Team WASP gives POGIE a POKE

by Lyndon Sharp

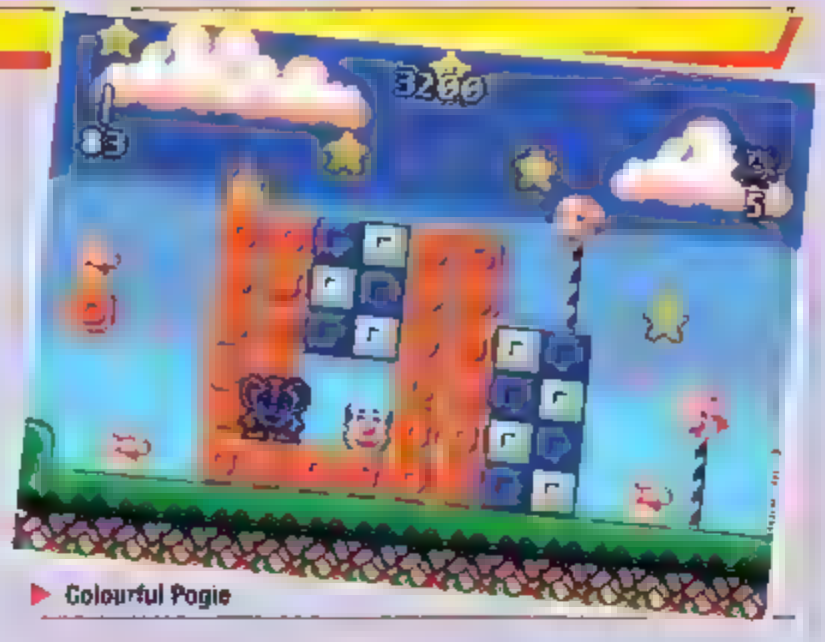
About six months ago, I remember seeing a brief article about the Spectrum Next on Facebook. It looked like a nice bit of kit and thought for old times' sake I'd like to write a game for it. As I'd worked with the Oliver Twins for three years my first thought was a Next Dizzy port, approached Philip and Andrew, but they were two steps ahead and had already commissioned ***Wonderful Dizzy*** with another development team. However, Philip offered me ***Dream World Pogie*** and thus, the next chapter of my Spectrum adventures began!

First, asked two artists I worked with if they would be interested which they were – but their workload was so great they didn't have the time So, put a post on the Next Facebook page. Enter Phoebus Dokos. He sent me a few examples of sprites and images he had done previously and that was enough for me. Phoebus then put forward Lampros Potamianos a Z80 coder he'd worked with and claimed was one of the best in Greece.

At this point I wondered whether Allister Brimble would be interested in handling the audio. (Allister and did tunes for Codemasters back in the day and he composed music for the company I work for currently, so – still big into the retro side of music – he was the natural choice.) When his email saying 'I'm in' arrived I knew we had a strong Next development team.

In the late 1980s–early 90s I went by the name of W.A.S.P (inspired by the band of the same name but meant to say We Are Spectrum Programmers), so it only seemed right to resurrect the name for our new adventure. Phoebus did a brilliant new Team WASP logo and everything else fell into place.

Dream World Pogie is a platform scroller, similar to ***Mario Bros*** in gameplay, but with the speed of ***Sonic*** and based in worlds full of candy, cakes and sticks of rock. The original ***DWP*** was a NES title only recently released by the Olivers through crowdfunding. Set over 15 levels and five themes of progressive difficulty, Dizzy's pet Fluffle Pogie must traverse blocks, gaps, enemies, water traps and machinery to reach the Portal to the next world. While for the most part a happy-go-lucky creature, Pogie also has a dark and menacing side to him.

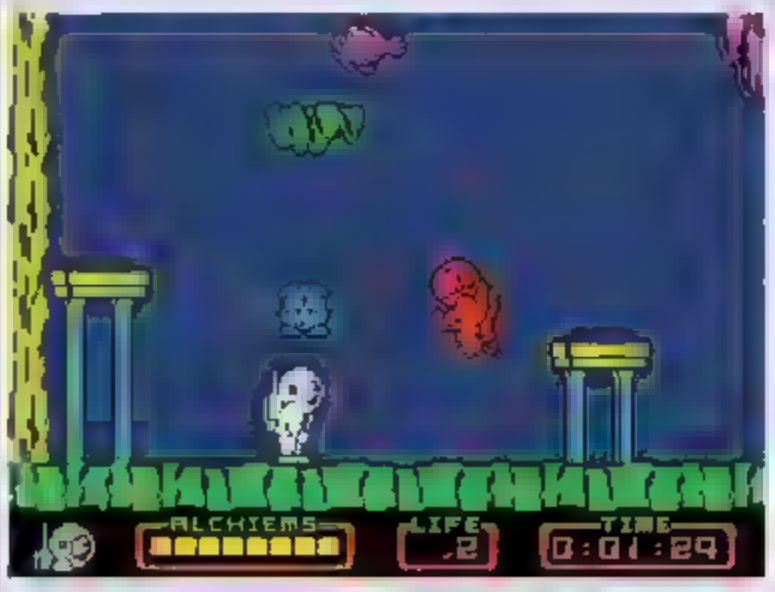


Colourful Pogie

DWP takes advantage of all the Next's capabilities, utilising all the hardware sprite and scrolling abilities, as well as its new DMA hardware, to make the game incredibly smooth and fast. As the screenshots show it's visually stunning, utilising the entirety of the Next's palette while keeping the retro look to a great degree so it acts as a go-between for the old and new generation of games. This is the first title by Team WASP which will be offered for free at the Next's launch and will be followed by other titles we have already started working on!

NODES ARE ON NEXT

Nodes of Yesod was a big hit for Odin Computer Graphics back in 1985. **Steve Wetherill**, one of the flip-screen original's developers, is looking to polish up the game for the ZX Spectrum Next and make it a smooth scrolling affair. The game has not started full development yet, but Steve has put a mock-up screen on his blog of how the game may look (below) – his preference would be to preserve the look of the original, but without the colour clash. Is this enough for a Next enhanced version?



CARRYING THE SPECCY TORCH

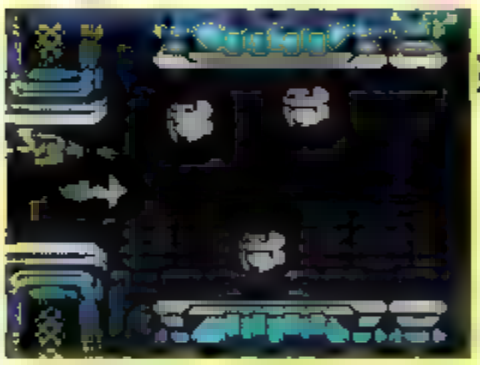
In the world of ultra-realistic graphics – PS4, Xbox, PC, Mac – the ZX Spectrum is often forgotten these days, when it comes to new releases on the beefy new machines and yet the Spectrum's influence is still visible, says *Flickering Myth*'s Villordsutch.

There are still game developers out there who carry the torch for Sir Clive Sinclair's classic computer and they show it in their more recent releases. On this page and the next is a small cluster of titles that clearly wear the love of the Speccy on their sleeves and all of them can be found online and downloaded for your enjoyment.

Project ZX

Richard Langford's sideways scrolling shooter for the PC is witness to a world in which an irate Sir Clive Sinclair unleashes numerous iconic ZX Spectrum (and ZX81) slices of gaming history against you, and taking control of an 'ode to *Cybernoid 2*-style craft, you have to take them down.

With 14 levels and a fair few secrets scattered throughout, this free-to-download game is available from Richard's website. A



former 48K Speccy owner, he brings the world of 8-bit wonder charging towards you – I promise you will be smiling like a Cheshire Cat when you play this.

Z-Exemplar

Everyone knows *R-Type*, quite possibly one of the greatest games to appear on the Spectrum. Now imagine someone who prized his Spectrum as a kid using *R-Type* as a template for his game *Z-Exemplar*. There are 961 planets, numerous weapons, aliens, humour and graphics that you'll swear belong on the Speccy. Well stop imagining it for both he and the game exists and they're quite brilliant!

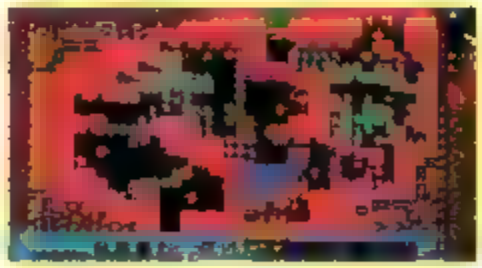
This sideways shooter is a labour of love

from Ed at Suminell Studios. It took over two years to fine-tune and it shows. Currently available on Steam, iOS and Android.

Rock Boshers DX

From the moment you turn on *Rock Boshers DX*. Director's Cut and select '8 Bit Computer Mode' you know you're going home as a screeching Spectrum loading screen builds line-by-line on the screen.

Playing a young Queen Victoria, currently an incognito stowaway, you're on Mars ... and in a pickle: along with the other passengers you're



forced to smash rocks. None too happy about this you plan an escape – but it's not going to be easy.

Again, Dugan Jackson of Tikipod brings his past love of playing on the classic machine to the universe of *Rock Boshers DX* and it is instantly recognisable. As with *Z-Exemplar* you would swear that this game could have been taken from the Spectrum. Purchase *Rock Boshers DX* for Steam (PC, Mac, Linux), PS4 and PSVita (Cross buy and Cross play) – on the PS4 version there is a battle mode which is not too dissimilar to a certain *Bomberman*.

Horace in the Mega Vault

We've had a cluster of Spectrum Horace games over the past few years – but Suntemple's mash-up of Imagine's Vic-20 *Mega Vault* and the world of Horace makes for one of the most devilishly hard Horace games yet. With Horace's father Herbert held hostage in a cage by Dr Zorkdef, it's up to Horace to navigate a maze of numerous moving

whatnots, lasers and traps, and then return with the key. You also have to retrieve food for your father and do it within a time-limit. What makes this game so 'ZX Spectrum hard' is the fact that everything is so pixel perfect – mess up and the level restarts for a do-over.

Something for all Horace fans whose temper isn't on a short fuse. It's available to download now on PC for free.

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As I write, I haven't yet received my CRASH Cap, surely the only appropriate headgear for an editor of CRASH? After me came a series of fine editors to guide (am I biased?) the best Speccy magazine. Time to pay tribute: Graeme Kidd, Barnaby Page, Steve Jarratt, Dominic Handy, Stuart Wynne, Oliver Frey, Richard Eddy and last but not least Lucy Hickman – they all added their own touch.

Were we always infallible? Of course not – check out the box below! But I would like to think we got it right more times than not, particularly when it came to the reviews.

Over the years, we were supported brilliantly by our contributors – not just the Ludlow schoolboys who provided all those playground opinions on the games we reviewed – giants such as Mel Croucher, Derek Brewster, John Minson, Angus Ryall and many others, all of whom were encouraged to speak out and give us their opinions on the state of Spectrum gaming, of the utilities, add-ons, conventions and – occasionally – other magazines.

Less obviously, perhaps, game programmers were enthusiastic supporters of CRASH, even when some of them received less than stellar reviews of the games they spent so long trying to perfect. CRASH Towers on King Street in Ludlow often rang to heated discussions between editorial staff and game developers about their latest projects and how little critics really knew about games when it came down to the line! Arguments were frequently settled over beers in the Bull, Newsfield's main local – and woe betide unwary tourists who settled on that long table in the streetside window, soon to be confronted by a crowd of frowning adolescents (well, some just out of their teens) making it obvious that it was time to go and find somewhere else to sit.

CRASH would have been impossible to administer without the unstinting effort of those behind the scenes: in mail order and subscriptions – particularly Carol 'It's a 14-year-old on the phone' Kinsey and Denise'll do it Roberts; in photographing the screens and editorial events – Cameron Pound and Michael Parkinson; in the art department – so many, but most essentially the great Markie Kendrick (a founding director of Imagine, the company that published *Retro Gamer*). And of course there was the advertisement department who made the real money to pay the salaries!

The CRASH Annual started as an idea thrown around in the sunny garden of the Blue Boar pub in Ludlow this April past. It was the Saturday of a book signing session for *The Fantasy Art of Oliver Frey* at the Castle Bookshop, when Fusion Retro Books publisher Chris Wilkins (a former 14-year-old) wondered what to do next after the Amiga book. It's taken a lot longer to produce the Annual than it used to do a monthly issue... I guess we're all slowing down just a little bit. But it's been fun and I hope everyone reading the result thinks it's been worth it. ■

MISTAKES OCCASIONALLY (AHEM!) HAPPEN

It seems there was a cock-up in Issue 16, as Issue 17's editorial pointed out in typical CRASH-who-cares? fashion, while exonerating designer David Western and placing the blame firmly on the rub-down Letraset transfer lettering!

DO-IT-YOURSELF CLIVE SINCLAIR KIT

Another first from CRASH!!

Did you spot the mistake in the Sir Clive article last issue? 'live Sinclair' were the opening words. Well, David the Demon Designer hadn't been at the gin bottle.

No, the Big C fell off the layout boards somewhere on the journey to the camera. Honest. So here's your very own cut-out-and-keep repair kit.

KICKING OFF KICKSTARTER

It's become customary to allocate some pages towards the end of a crowdfunded book to list the Kickstarter campaign backers as a thank you for making the project a reality. But we felt that readers/backers of this Annual would prefer us to devote those (several) pages to more editorial material rather than to a long list of names. That doesn't mean the gratitude for making it happen is any the less for that! However, you don't need to miss out because the nice people at **Fusion Retro Books** have devoted a lot of space to naming all of you. You can find yourself at the URL below, and a big thank you to everyone else for joining us in the CRASH Annual 2018.

https://fusionretrobooks.com/pages/crash-kickstarter-backers

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